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## Confero: Essays on Education Philosophy & Politics

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*Volume 7 Issue 1 September 2020*

## Editorial: *Navigating in a Measurable Epistemic Landscape*

*Johan Forsell, Tina Lidström, Elisabeth  
Tenglet & Emilia Åkesson*

*Policy instruments such as indicators and the whole audit and performance-monitoring nexus have become a significant element of the shift from government to the governance of national education systems through new institutional forms (...).*

- Grek (2009, p. 25)

**D**uring the last decades, measurability has become a governing element in educational institutions through changes in the epistemic landscape. Consequently, the kind of knowledge preferred within this epistemic landscape places results, performance and effectiveness at the forefront of educational objectives in educational institutions. In turn, the changing epistemic landscape spurs changes in how humans navigate within these educational contexts (Grek, 2009).

In the context of academia, researchers are apt to institutional practices of displaying their research in minimized versions within

the institutional forms of an economy of publications, leaving little or no space to philosophical underpinnings to the research conducted. The matter of institutional practices and logics in academia was highlighted in *Confero's* first issue (Nylander, Aman, Hallqvist, Malmqvist & Sandberg, 2013). In this previous issue, ambiguities in the publishing system were discussed i.e. the dual nature researchers encounter through the ethics of the research community in terms of e.g. helping colleagues with peer reviews as well as the logics of turning the work of researchers into profitable entities played out in the economy of publications.

In higher education the trend towards measurability, standardization and effectiveness has been highlighted from various perspectives. In the thought-provoking essay *The Formation of Thinking* by Jonna Hjertröm Lappalainen, in this issue of *Confero*, the author is navigating contemporary debates on thinking in higher education with an anchoring in philosophical viewpoints. Lappalainen starts off with a thorough discussion on how thinking could be understood and thereafter connects this to the changing higher education. The author argues that the idea of thinking as a generic skill in education, rose during the 1990's in the Western education system as a part of the implementation of *The Bologna Declaration* (European Higher Education Area, 1999). The essay discusses and defines the idea of thinking with support from Dewey, Socrates, Plato, Kierkegaard, and Arendt and connects this idea to teachers' professional work today. Lappalainen criticizes the idea of regulating thinking within administratively articulated legal documents and shows how this idea saturates the Swedish higher education system, in a manner that aims to measure and assess the ability to reflect and think, following a focus on achievement rather than content in course syllabi. Lappalainen refers to Arendt while concluding that "thinking has now been reduced to the handmaiden of knowledge" (p. 29).

Furthermore, in the school context the so-called 'governing by numbers' is visualized through the results in PISA (Programme for International Student Assessment) derived from the OECD (the Organization for Economic Co-operation and Development) – placing emphasis on this supra-national organization as an actor,

within education, in a globalized school context. Accordingly, the public holds its breath awaiting the status of students' knowledge displayed in visually agreeable measurements, in national media, on matters that are truly complex. In the second essay of this issue of *Confero*, Svein Sjøberg aims well-articulated critique towards the PISA - project in *The PISA-syndrome – How the OECD has Hijacked the Way We Perceive Pupils, Schools and Education*<sup>1</sup>. As Sjøberg states, the PISA - project has got its grasp and strong global influence on national education systems. PISA has set a standard for educational quality and has also become a kind of compass for politicians to use in arguments for educational reforms. Results from PISA have great impact on our views of e.g. education spurring competition between nations in who succeeds and who does not. Thus, Sjøberg argues that we must be careful with how we use and interpret the results from PISA:

PISA claims to measure skills and competencies that are important for the future economy and employability of contribution to the personal, human and social development of the child with an overall aim to help them become well-informed and well-functioning individuals and citizens. (...) PISA assumes that this complex set of purposes of the school can be reduced to one common. Standardized and measurable metric, independent of country, culture and context (p. 39).

Accordingly, PISA has become a part of today's landscape of measurability, which surely requires its compass when navigating this landscape. In this manner Sjøberg's essay is an important contribution towards a deeper understanding of the influence of global policy actors e.g. the OECD and their projects e.g. PISA.

Furthermore, the PISA-results have formed the basis for national reforms and political initiatives on the road to a European knowledge economy previously formalized as an approach in the *Lisbon Strategy* (2000) set by the European Council in 2000 and later updated in 2005.

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<sup>1</sup> Prepublished in *Confero* february 20th 2019.

Moreover, a certain kind of preferred knowledge embedded in certain epistemic values<sup>2</sup> connected to institutional practices that underpin this knowledge are testimony to significant changes in educational institutions. Changes influenced by global policy actors e.g. the OECD. An institutional practice, which underpins the objective of quality in education, raises questions of measurability and preferred values within education is the practice of quality assurance. The focus of Kaminski's essay *The Hidden Ideology in Objective Measurements – an example from a Specific Tool for Quality Assurance in Schools* is the practice of quality assurance (QA) and the hidden ideology it entails. In the third essay of this issue of *Confero*, Kaminski critically analyses a specific tool for quality assurance used by a municipality in Sweden, which is promoted as a tool to measure and verify the quality of a school. Using analytical concepts such as 'pseudo quantities' (Liedman, 2012), 'scales of measurements', 'goal rationality' and 'the prism metaphor' Kaminski argues that the practice of quality assurance is ideological, rather than a tool for quality assurance which provides descriptive information and objective measurements of quality. In the analysis, Kaminski reveals the hidden ideology within the tool for quality assurance and describes in what way it may govern schools. Throughout the essay, Kaminski raises issues with the practice of quality assurance and the hidden ideology within the tool, and philosophically considers its political as well as professional implications (in school, the education system and society as a whole).

Thus, the aforementioned aspects of governance e.g. measurability and the objective of quality in education, driven by the discourse on an educational crisis (Popkewitz, 2011), affect the very nature of the epistemic landscape of these educational institutions and in turn how humans navigate through this changing landscape.

For this special issue on *Navigating in a Measurable Epistemic Landscape* we invited contributions from scholars with various disciplinary backgrounds to debate the measurable epistemic

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<sup>2</sup> The philosophical underpinning of the concept of 'epistemic value' is derived from Plato's *Meno* focusing on the questions of why and in what sense knowledge is important



values, logics and practices of educational institutions such as school and university. Hence, we further the discussion of *Confero's* first issue *Managing by Measuring: Academic Knowledge Production under the Ranks* (Nylander et al., 2013) by highlighting the measurable epistemic landscape of the broader educational system.

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## The Formation of Thinking

*Jonna Hjertström Lappalainen*

**I**n recent years, we have seen examples of how political leaders, such as Bolsonaro in Brazil or Orbán in Hungary, have controlled and restricted the freedom of the university in a way that frightens us and reminds us of the inherent fragility of our own societies. However horrible these political acts are, I would like to claim that there is a danger in letting oneself be hypnotized by those who hold political power and who, through dramatic gestures and authoritarian rule, suffocate free thought. Equally important is to pay attention to the slow and barely noticed political processes in which, through government directives and reforms based on economically motivated ideas about efficiency and employability, officials and authorities limit the freedom of higher education. An example of such a process I would like to scrutinize is how *thinking* came to be regarded as a generic skill in the Western education system. Why did teachers, suddenly during the 1990s, begin to regard thinking as a skill that students and pupils had to be educated in. How did training and education in thinking skills become an important focus for the teachers' professional work? At first glance it might not seem like an important change. It strikes us as something beneficial that teachers would strengthen and challenge students' intellectual skills. It is also a fact that every government controls their systems of education. Nonetheless, we ought to ask why different governments at this point started to increase the control and define the forms of education in the skill of thinking.

Especially when it happens on such a large scale. Should not the very fact that it takes place so extensively make us suspect that these changes might be driven by a wish to control thinking? And thus, make us ask why and for whom?

We see this change of focus in different governing documents about the education system. Throughout Europe, greater emphasis is placed on students' and children's thinking skills as something that must now be actively developed and strengthened by teachers and educators.<sup>1</sup> We find in all Swedish elementary school curricula an emphasis on training children and students in thinking skills.<sup>2</sup> It is also enrolled in the Swedish Higher Education Ordinance.<sup>3</sup> In 2007 Sweden had a new examination ordinance, according to which every higher education was obliged to clearly and comprehensively exhibit every learning objective the students were supposed to achieve during their studies. While previous syllabi mainly explained course content, they were now supposed to function as descriptions of what a student would achieve on completing the course. In connection with this, the course

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<sup>1</sup> Perhaps the most striking example of how this transformation occurred and was implemented at high speed is the McGuinness Report published in 1999 in the UK: *From Thinking Skills to Thinking Classrooms: A Review and Evaluation of Approaches for Developing Pupil's Thinking* (McGuinness, C. Department for Education and Skills (DfEE) report). This report, which was a one-person study conducted by a psychologist, led the government to issue directives on the importance of teaching students to think. Just a few months later, "Thinking skills" were introduced to the national curriculum. Winch C. (ed.) (2010) *Teaching Thinking Skills* (London & New York: Key Debates in Educational Policy, p. 2f.

<sup>2</sup> We find thinking skills as objectives in all Swedish curricula: the curriculum for Preschool (Lpfö 18), the curriculum for the compulsory schooling, preschool class and school-age educare (Lgr 11) and the curriculum for upper secondary levels (Lgy 11).

<sup>3</sup> In the Higher Education ordinance (Högskoleförordning 1993:100), one principal objective for Teachers education as well as doctoral students in the fine, applied and performing arts is the "ability to reflect" and "reflect critically".

objectives also began to include various generic skills that the students should acquire, for example "identify", "relate", "compare", "analyze", "motivate" and "criticize".

In this paper I will investigate how this focus on thinking came to be incorporated as an explicit task in Swedish higher education. Changes in the higher education are a topic that has been discussed in innumerable ways. One prevalent discussion has been related to trends such as standardisation, digitalisation, and specialization in the welfare state in recent years as well as effects of the neo-liberal reforms of the 1990s (Hood & Dixon, 2015; Bornemark 2018; Bejerot & Hasselblad 2002; Lindgren, 2006). Another lengthy discussion has been about the difference between education and *Bildung* in Humboldt's traditional sense (Humboldt, 1960; Bloom, 1987; Gustavsson, 2007). Both these discussions are highly relevant for my investigation and I suspect that the reader might detect my positions in relation to these debates. My intention, however, is to take a different angle of incidence to these changes; I will look closer at how the detailed governance of education in the skill of thinking entered the Higher education governing documents from a practical perspective. I will take departure in the Bologna declaration, study these directives' itinerary from the European committee down to the local universities. How they were implemented, by whom and what role did the universities, and their employees, play in this implementation.

Before I go into how this focus on thinking came to be incorporated as an explicit task in higher education, I would like to philosophically delve a little into the question of how we should understand thinking skills: what are these skills that teachers are supposed to focus on? What is it to think? I thereby hope to make the reader aware of that the present discussion of how to strengthen students' thinking skills rests on a narrow and unilateral understanding that misses how complex and versatile human thinking is.

## Philosophical notions of thinking

Thinking is often regarded as what separates human life from other forms of life. Although different forms of organic life can feel, react, sense and strive for survival, it is the capacity to think that indicates the specificity of human existence – with its thoughts, concepts, inventions and dreams. From a philosophical perspective, thinking is both something revolutionary to organic life and something essential to human life.

## Thinking understood as problem solving

One philosopher to have considered the question of how to understand thinking, and who had a great influence on education and the educational system, is the American pragmatist John Dewey. While Dewey views thinking as essentially human, he understands it as something fundamental that springs from the animal and bodily constitution. Dewey understands thinking as an essential part of every experience. According to him, every experience we make implies the act of thinking. Dewey makes a distinction between the purely perceptive experiencing and *an* experience. A child sticking her fingers into a candle flame does not automatically have an experience. But when the child associates the event with its consequences, i.e. pain, it becomes an actual experience. The pure perception becomes *an* experience by thinking. An experience is the consummation of a moment of perception (Dewey, 2007).<sup>4</sup>

When thinking is regarded in this broad sense, it turns out to be something that humans have in common with animals. A cow can learn to recognise different types of grass and a cat can learn what to expect from different residents in its neighbourhood. Here, I think that Dewey's way of locating thinking in human practical life shows an essential aspect of thinking. According to him, thinking is understood as something almost instinctive arising out

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<sup>4</sup> See also *Art as Experience* (2005) in particular in chapter 3 "Having an Experience".

of our everyday practices, and which later turn into more complex and sophisticated forms of thinking. What is interesting in Dewey's view of thinking is that the pragmatic and bodily aspects of thinking become significant. Thinking is something that takes place in an embodied self within a social environment.

According to Dewey, what is essential to human thinking can display itself in a more developed sense. From this primitive thinking more sophisticated forms can arise. In his book, *How We Think* (1986), Dewey tries to show in detail how *reflective* thinking arises out of action and a willingness to solve emerging problems. Thinking occurs when problem solving leads to perplexity. He also emphasises that not all problem situations lead to reflection. If I run into a problematic situation and immediately follow the first best solution that springs to mind, I do not critically evaluate any arguments or facts, i.e. I do not reflect. Even if every problematic situation in some way makes us think, reflection only occurs when "one is willing to endure suspense and to undergo the trouble of searching" (Dewey, 1986, p. 123f.). Dewey writes:

When a situation arises containing a difficulty or perplexity the person who finds himself in it may take one of a number of courses. He may dodge it, dropping the activity that brought it about, turning to something else. [---] Or, finally, he may face the situation. In this case, he begins to reflect. (Dewey, 1986, p. 196)

Based on this description, Dewey divides reflective thinking into five steps: (1) suggestion; (2) intellectualisation; (3) hypothesis; (4) reasoning, and (5) testing and action (Dewey, 1986, p.123ff, 196).

Dewey thus provides us with an interesting account of thinking, showing how at one and the same time it is at its very basis bodily as well as revolutionary in opening up a human world of thoughts, concepts, inventions and dreams. In presenting such a clear division, Dewey also lays the philosophical ground for talking about thinking as forms of skills – a principal reason why he has had a major impact on pedagogy and educational institutions.

Dewey's understanding of thinking is not without its problems. First of all, he presents thinking primarily as a form of problem

solving. Such an understanding, however, risks reducing these skills to instrumental tools in search for practical solutions or knowledge. Thinking is not only a matter of problem solving. It is also the ability to navigate in different thought spaces than those offered by tradition, politics and the market; it is the capacity to push beyond and to rebel against existing orders. This negating, or rebelling, aspect of thinking interested the German philosopher Hegel with respect to the emergence of human consciousness.

### **Thinking as a way out of illusion**

In *Enzyklopädie der Philosophischen Wissenschaften* (1986), Hegel uses the Biblical story of Adam and Eve as an image of how human beings developed the capacity to reflect. Adam and Eve are analogous to innocent children. They live in the present, unaware of consequences, ignorant of right and wrong, and unaware of themselves as subjects. Yet everything changes at the very moment when Adam and Eve eat the fruit of knowledge; they are thrown out of Paradise and into a world of consequences, labour and death. Their innocent childhood is lost. The moment when they begin to see the world in a new way is described in the Bible thus: “And the eyes of them both were opened, and they knew that they were naked; and they sewed fig leaves together, and made themselves aprons”(Gen 3:7). Adam and Eve start to see themselves with a viewer’s gaze. This is the moment when there is a crack in the innocence of the childish life in absolute presence, a gap in the relationship to being. The child sees itself. Hegel understands the story as a picture of how human consciousness arises as a split between subject and object. The human sees herself; she sees her subjectivity as an object. Through this, the human can begin to reflect; she can regard herself as an object among other objects in a world. This is an illustrative picture of how philosophers have understood thinking; as an impersonal and distant gaze that liberates a human being from her natural state, she is no longer governed by pure instincts and desires. According to Hegel, this distanced gaze is located in a subject who is something more than either an innocent child or an animal desire. An ability that arises and that makes the human free to think beyond both the animal and the given (Hegel, 1986, pp 87-91).

Hegel's account is compelling because it shows how the thinking subject emerges as a revolt against, for example, religious or traditional explanations. The decisive factor here is that, in order to be understood as thinking, the subject's negation of the prevailing state of things, must be motivated by a form of rationality. It must not be merely an expression of the subject's feelings or desires. What Hegel emphasises, among other things, is how thinking is something that emerges or arises. In this way, thinking becomes something other than pure problem solving, instead it opens up worlds and surprises the subject. This is an account of thinking that takes us beyond the model of the problem-solver. Hegel's interpretation of the Biblical story thus displays a view of thinking rather as a force or a power to transcend what there is.

In the history of philosophy, Socrates is the one who personifies the belligerence or power of thinking. In Plato's dialogues we find elaborate descriptions of Socrates' simple life, his ability to stand above his physical desires, his courage and his persistent engagement in discussion. Socrates' struggle with the rulers of Athens - which led to his trial and execution - becomes thus a display of an imperturbable will to objectivity. Plato dedicates much space to these traits in Socrates' character, clearly showing that Socrates cannot be understood as motivated by self-interests, such as strengthening his economic or social position. Plato's Socrates cannot be understood as personalising thinking in the sense of problem solving. Socrates does not solve any problems, on the contrary, his thinking creates problems; it endangers his own personal situation as a citizen in Athens. Characteristic of Socrates is his elevation of his thinking as something more important than all the problems he confronts. For Plato, thinking can rather be said to be a form of truth-seeking.

One possible objection here is that the figure of Socrates could in some sense be an expression of the highest form of thinking presented by Dewey. For example, Dewey argues that the form of developed thinking he calls reasoning is about "extending knowledge" (Dewey, 1986, p. 204). According to Dewey,



reasoning can lead the thinker to reformulate his hypothesis and thus, in a sense, transgress the framework for his investigation (Dewey, 1986, p. 204). I would now like to claim that, while it affirms thinking as a changing force, Dewey's pragmatically oriented study still misses the uncontrollability and immense power of thinking. It gets stuck in an understanding of thinking as a process in relation to knowledge and problem solving. The figure of Socrates highlights other sides of thinking. Let me develop this on the basis of two other philosophers who have written about Socrates as the image of thinking, namely Søren Kierkegaard and Hannah Arendt.

Kierkegaard's authorship is largely about his endeavour to try to think beyond his contemporary illusion [*sandsebedrag*], that is, beyond common perception, and common thinking. The factual illusion Kierkegaard devoted all his writing trying to escape was the scientifically and politically sanctioned Christianity that prevailed in his day. He sought a position where he could believe and relate to God in ways other than through the traditional theological or ecclesiastical interpretations of scripture or of the Church's sermons on Jesus' meaning and goodness. In this sense it is a form of opposition or destruction of prevailing thinking of faith and God. Kierkegaard sought a position of faith beyond what his contemporary Christian institutions and fellows put at his disposal. In this search, Socrates was his role model. In the book *Philosophical Fragments* Kierkegaard develops this point, understanding Socrates as an example of a teacher who leads his disciple out of the illusion of his contemporaries. He lets Socrates personify thinking as a passion. Kierkegaard describes it as the paradoxical passion of the mind. It is a passion that does not end until it brushes up against its own boundaries. He writes that what this passion wants, without really understanding itself, is its own downfall. Kierkegaard compares this passionate thinking with love, writing that a man lives his life undisturbed in himself, until suddenly he wakes up in love with another human being:

Just as the lover is changed by this paradox of love so he does not almost recognize himself anymore, so also that intimated paradox of understanding reacts upon a person and upon his self-knowledge

in such a way that he who believed that he knew himself now no longer is sure whether he perhaps is a more curiously complex animal than Typhon. (Kierkegaard, 1985, p. 39)

Kierkegaard points out that Socrates thus prefers being uncertain about whether he is a human or a beast rather than having an unfounded idea about in what his humanity consists, which would mean staying in illusion. For Kierkegaard, Socrates is the image of a movement of thinking, which is not primarily about finding an answer, but instead about the passion of thought, which is driven to its very limits. This thinking is something quite different from an instrumental means of reaching knowledge or solutions. Instead, it is an insatiable passion that tends to get frustrated when it has at its disposal readymade answers. A searching that finds itself at ease with an answer is not thinking in the Socratic sense; it is instead a desire for knowledge, that is to say, a problem solving. That is why Socrates, in constantly touching the boundaries of thought, is a role model for thinking.

In his dialogues, Plato depicts Socrates as being “aroused” by his interlocutors' self-righteous opinions and statements. And although Socrates, in his passionate seeking, is looking for answers, he is constantly caught up in aporias. For Kierkegaard, it is a display of the difficult art of how to escape the illusion.

### **Thinking as a destructive power**

Arendt was also interested in Socrates' uncompromising strive for answers and how this would often end up in aporias. She does not call thinking a passion, but an *eros* that can only be satisfied through thinking (Arendt, 2003, p. 179). Like Kierkegaard Arendt emphasises how Socrates does not give any positive instructions or answers. She further claims that Socratic thinking turns out to be something that, in Kant's word, has “a natural aversion” against accepting its own result as “solid axioms” (Arendt, 2003, p. 167). Like Kierkegaard, Arendt sees Socratic thinking as leading man out of contemporary illusion; it is a task that allows one to discard unexamined prejudices and shallow opinions.

Arendt goes further than Kierkegaard in emphasising the difference between thinking and knowing, describing this very difference as a conflict. Knowledge is cumulative; it is with the thirst of knowledge we build worlds and civilizations. Knowledge benefits society. Thinking, on the other hand, “does not create values, it will not find out, once and for all, what ‘the good’ is”. Thinking dissolves rather than confirms (Arendt, 2003, p. 188). Arendt emphasises how thinking is an act of dissolution, it is destructive and dangerous. But it is also precisely this dangerous dissolving power that both Kierkegaard and Arendt are looking for. Arendt continues:

The purging element in thinking, Socrates’ midwifery, that brings out the implications of unexamined opinions and thereby destroys them – values, doctrines, theories, and even convictions – is political by implication. For this destruction has a liberating effect on another human faculty, the faculty of judgement, which one may call, with some justification, the most political of man’s mental abilities. (Arendt, 2003, p. 188)

When Arendt writes that thinking is implicitly political, she links it to the traditional idea of *Bildung*. The destructive and subversive side of thinking is a part of the traditional idea of *Bildung*, since it enables the individual to relate to himself as a temporal being, to tradition, religion and history.

*Bildung* in this traditional sense strives to give the student the possibility to relate to his or her personal life, life-world and contemporaneity in an independent way and not just on the basis of animal desires or one’s obedience to higher authorities. I would like to claim that it is thinking in this particular sense that causes some political leaders to feel threatened by free thought. Arendt further claims that thinking must never be reduced to serve only knowledge or solely be guided by practical purposes; it must not become what she calls “*a handmaiden of knowledge*, a mere instrument for ulterior purposes” (Arendt, 2003, p. 166). Thinking is the power that purifies and removes solidified values, and the power that uncovers unknown areas. A human incapable of thinking in the Socratic passionate sense, uncritically maintains the prevailing dogmas of knowing. She is simply a henchman, a

bureaucrat or a tool. In “Thinking and moral considerations”, Arendt discusses the German Nazi officer, Adolf Eichmann, as an example of such a henchman, someone who is “incapable of thinking”. (Arendt, 2003, p. 160).<sup>5</sup>

Arendt and Kierkegaard address aspects of thought other than those shown by Dewey's sub-divisions of thinking. These thinkers also explore how thinking might be something completely different from problem solving, namely the human capacity to question and to oppose unexamined convictions, prejudices and doctrines. They also show that to a certain extent such a thinking tends to become an uncontrollable power. Arendt further points out that this uncontrollable power plays an essential role in political life. With all this said, I would now like to move on to my original question: what kind of thinking is the education system required to teach?

## The Bologna Declaration and its implementation in Sweden

Let me start by saying something about the abovementioned change within the European higher education systems and how this took place. The ability to think was introduced as a generic skill in the governing documents of the higher education institutions in accordance with the so-called Bologna process. The aim was for European educational institutions and governments to jointly strengthen the competitiveness of European universities internationally. One of the most important goals was the creation of the European area of higher education as a pathway in promoting European citizens' mobility and employability and the continent's overall development (The Bologna declaration, 1999). The idea was to facilitate citizens' movement between European countries and at the same time to make use of their previous education by making it comparable with different countries. The Bologna Declaration states that co-signatories must strive for six

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<sup>5</sup> This is further developed in her book *Eichmann in Jerusalem: a report on the banality of evil* (1963).

operational objectives. The first objective (the principal focus for this text) was to adopt a system of easily readable and comparable degrees. This goal explicitly advocates a demand for the bureaucratic equalisation of all countries' education systems. At the same time, the document also contains an important caveat, namely the assertion that this transformative process must take full respect of the diversity of cultures, languages, national education systems and of University autonomy. In addition, it is claimed that this will be undertaken in collaboration with both governments and non-governmental organisations that have knowledge of higher education.<sup>6</sup> The risk of a unilateral focus on higher-tier changes seems to be modified by the declaration's stated vision that the transformation should take place in collaboration between different countries and in cooperation with their widely different higher education institutions.

The problem is that the declaration says almost nothing about how this transparency and comparability should be implemented in practical terms. Initially, several discussions about the form of implementation were conducted, according to which the views of different educational institutions about how to actualise these changes played an important part. One issue discussed was the comparability of degrees. Let me give an example from such a discussion in a report from the former Swedish National Agency for Higher Education [*Högskoleverket*] 2001 (today the Swedish Higher Education Authority [*Universitetskanslerämbetet, UKÄ*]):

There are slightly different views around Europe in terms of setting requirements and conditions for different degrees. According to QAA [The Quality Assurance Agency for Higher Education, UK], they can be summarized in the formula "time served versus

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<sup>6</sup> "We hereby undertake to attain these objectives - within the framework of our institutional competences and taking full respect of the diversity of cultures, languages, national education systems and of University autonomy - to consolidate the European area of higher education. To that end, we will pursue the ways of intergovernmental co-operation, together with those of non-governmental European organisations with competence on higher education." (The Bologna Declaration 19 June 1999)

outcomes achieved". In line with an increasingly diversified group of students, universities in the UK have shifted towards the latter. It is the results and not the time that is most important. The same tendency can be noted in some continental countries. (Högskoleverkets rapportserie 2001:10 R. p. 27.)

Interestingly we here see an explicit discussion concerning whether exam requirements could be designed in ways other than by focusing on ensuring that students achieve learning objectives. We find discussions taking place concerning how the amount of time a student has spent in education might be part of the degree requirements. In these discussions, however, it can be assumed that even the Swedish view conforms to the idea that results are to be determinant over time. Indeed, this is confirmed by the report's later discussion of the importance of how higher education institutions must guarantee that students actually meet the objectives of course syllabi. (Högskoleverkets rapportserie 2001:10 R. p. 89f.)

At the beginning of the 2000s, a strategy was adopted to ensure that the Swedish education system would meet the requirements for both transparency and comparability. In 2007, amendments were made to the Higher Education Act, which clearly defined the requirements for course syllabi and for enhanced clarity in the articulation of course aims and objectives (Regeringens Proposition 2006/07:107).<sup>7</sup> As the new law was implemented at various universities, the relevant authorities and organisations began to formulate their own internal directives. The now closed authority NSHU (Swedish Agency for Networks and Cooperation in Higher Education [*Myndigheten för nätverk och samarbete inom högre utbildning*]), also drafted a support document to

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<sup>7</sup> See also press release from Utbildningsdepartementet June 21 2006: <http://www.mynewsdesk.com/se/pressreleases/hoegskolereformen-2007-kvalitet-och-internationalisering-39440>

provide clear directives and assistance for universities designing new course syllabi.<sup>8</sup>

Moreover, the Swedish Association of Higher Education Institutions SUHF [*Sveriges Universitets och Högskoleförbund*] started issuing support documents. In 2011 they stated, among other things, that a syllabus should contain the course's learning objectives, the main content of the course and "the forms for assessing students' performances". These guidelines and directives began to emerge as a way of concretising the content of the law, at the same time as they aimed to tighten the requirements for clearly formulated course objectives. It is worth noting, however, that directives are still formulated in a way that leaves it to the individual educational institutions to define the forms of clarity and the objectives to be written into course syllabi. Owing to the fact that they were open to interpretation, individual universities were uncertain about how they would actually live up to the requirements. In order to support the teachers' work with syllabus writing, the individual educational institutions now began to prepare internal documents. It was in these later stages that the control and formation of thinking skills became both rigorous and detailed.

## The university's implementation of the declaration

Before exploring these internal documents in detail, it is worth noting that they were created at a time when the educational situation was beset by other challenges. An important factor here was the university's transformation from elite to mass education, leading to the substantial expansion of higher education during the second half of the 20th century.<sup>9</sup> No longer is university for a few; today, about 50 percent of young people enroll on higher

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<sup>8</sup> NSHU (Swedish Agency for Networks and Cooperation in Higher Education [*Myndigheten för nätverk och samarbete inom högskoleutbildning*]) "Att skriva förväntade studieresultat. Stöd för förväntade studieresultat på kursnivå". This material was produced within the project "Webbaserad kvalitetsstöd för högskolornas pedagogiska arbete kring lärandemål, examination och läraktiviteter". 2006-10-11.

<sup>9</sup> See e.g., Ostermann (2002), Gustavsson (2009) and Bohlin (2008).

education courses and programmes. (Högskoleverket 2007) This means also that the composition of the student cohort, which university teachers encounter, has changed. Today's student groups are significantly larger and more heterogeneous than before. Many students are, as explored in documents and reports, often less well equipped for university studies in comparison to previous student generations (Trow 1973, 2006). It was in this new teaching situation that higher education programmes were obliged to formulate measurable examinable goals. This also led to the emergence of a new type of administration that was partly financed by fewer teaching hours. The Bologna Declaration's directive was thus implemented in a situation characterised by large organisational transformations, fewer teaching hours than before, and demands for savings and profitability. Because of this, teachers, who were responsible for the implementation of formulating clear and comparable course objectives, also faced the challenge of getting large heterogeneous student groups to complete their education with less time for teaching.

Considering this lack of time and funding, it is understandable that the institutions' own guidelines set out significantly more detailed directives. The guidelines are in the form of manuals that inform teachers about which things to think about and how to go about thinking them. An example of this is the guidelines for the Faculty of Social Sciences at Stockholm University. The following is written under the heading "Expected study results":

This point can probably be said to be the core of the syllabus, and the one that requires the greatest consideration when it comes to content and formulations. Important to note is that all the expected study results of the course must be achieved in order for a student to be approved for the course, which in turn means that all of these must in some way be included in the examination.

This formulation states that the core of the syllabus is the expected study results. The most important thing is not what the course contains or instructs but what the student should achieve. This shift in a sense may seem small but in reality it is not. The core is no longer what the course offers, but what the students are expected to achieve. When this shift in focus is combined with the



requirement to adapt education for large student groups with varying qualifications, it is clear that the core is now about how the teacher, with fewer teaching hours than before, should as effectively as possible succeed in getting as many students as possible to achieve degree objectives. Another aspect emphasised is that all objectives are formulated in a way that can be examined. This formulation is more extensive than is immediately apparent, since in practice this implies that the syllabus defines not only the course content but also the structure of teaching instruction. When the syllabus clearly describes how the objectives are examined, it thus also defines how the teacher should organise his / her teaching time; the syllabus thus restricts the teacher, encouraging her to spend a certain part of her allotted time on the assessment of course objectives (for this is what will be controlled in case of evaluation). The syllabus places great emphasis on how the course is examined, not what it contains nor on ensuring that the quality of teaching reaches an adequate level. Here we see how a detailed regulation of the teaching structure creeps in.

In the guidelines from the Faculty of Social Sciences at Stockholm University it is further stated that “expected study results should be formulated with the student as subject and with active verbs” and that “the study results should be observable and possible to examine” (Stockholm University, 2018). What is interesting here is the introduction of active and examinable verbs that are linked to the student's ability. It is in this way that the guidelines begin to focus on the student's generic skills. It is among these generic skills that we find thinking skills. The guidelines for Södertörn University (2010) are more detailed and also give concrete suggestions on which active verbs to use depending on the level of the course:

<b>Introductory level</b>	<b>Intermediate level</b>	<b>Supplementary level</b>
Define	Relate	Analyse
Describe	Explain	Criticise
Identify	Compare	Value
Exemplify	Summarise	Contrast
Name	Defend	Motivate
	Illustrate	Categorise
		Generalise

While a student at the introductory-level should learn to describe or exemplify ethical theory, a student at the supplementary-level should be able to analyse or critically interpret ethical theory. The guidelines states: “Of course there is no absolute connection between verbs and level”, but otherwise there is no further discussion of the choice or selection of verbs (Södertörn University, 2010, p. 12). These guidelines have been designed with the aim of supporting teachers in the work of writing syllabi. Legal considerations are also important. The document serves as a way for the university to ensure that the syllabus meets the legal requirements. But since the support document is designed as guidelines, this means, in a Swedish context, that they become rules that the employees must follow. Thus, this support document also becomes a way of regulating how university’s teachers should work with teaching thinking skills.

To support the design of how students’ generic abilities would be formulated into examinable learning objectives, two taxonomies about thinking were used: Bloom’s taxonomy and the SOLO taxonomy. The active verbs used in the guidelines are also identical to the verbs used in these taxonomies. SOLO stands for “Structure of the Observed Learning Outcome”. It divides the skill of thinking into different modes linked to different levels of learning (Biggs & Tang, 2007, p 76ff.). Like Bloom’s taxonomy, this model is designed for a pedagogical purpose, namely to make teachers reflect on how they can help students achieve the course objectives. The taxonomies were thus developed as an instrument to support teachers in their work with students and to induce them

to reflect on students' different learning phases from a psychological and pedagogical perspective. It is possible here to see an influence from Dewey's classification of thinking as different levels of problem solving.

This instrument, designed to induce teachers to reflect on students' different learning phases, in conjunction with the systematic work of establishing support for syllabus writing, was increasingly used as a manual for student learning.<sup>10</sup> This is precisely how the internal documents came to define which thinking skills universities ought to teach their students. The forms of thinking that are conspicuous by their absence are the subversive, exploratory and perhaps ultimately destructive forms of thinking that the Socratic picture shows us, and which Arendt linked to the traditional ideal of *Bildung*. Such thinking might also be difficult to formulate as an examinable generic ability. Instead, thinking skills are understood as different forms of problem solving, in accordance with Dewey's levels. In this way, Swedish universities have, on the basis of the Bologna Declaration's directive, interpreted and defined how students should learn to think, and also what form of thinking they should learn, namely problem-oriented thinking, which can be formulated in examinable objectives, and which moreover is possible to evaluate and compare.<sup>11</sup>

In the support directives and guidelines, we see, on the one hand, a clear focus on legal security and transparency. But, on the other

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<sup>10</sup> In addition to these guidelines, several higher education institutions often drafted even more specific documents for the committees that would review course syllabi and additional supporting documents to assist the individual teachers in syllabus writing.

<sup>11</sup> Something else that is worth noting is that this also means less trust in the universities and the teachers. Their overall teaching competence and professional judgment no longer came to be seen as a satisfactory assurance that the student achieved the learning objectives. Now, each student's achievement of the individual goals would instead be documented and ensured primarily by external scrutiny based on legal considerations.

hand, we lack the caution and openness that emerged in both the legislative texts and higher authorities' discussions and directives on what specific form of thinking universities should cultivate. Certainly, from an organisational perspective, these internal guidelines and supporting documents were needed to implement the legislative changes. What is remarkable is how these documents were enunciated.

The guidelines have been enunciated on legal requirements with scant reference to a psychological model for thinking, which has been modified by pedagogical theory. The very question about what the teacher should really be teaching the student has never been subject to any deeper educational or philosophical examination. What is remarkable is that it is the Swedish higher educational institutions themselves that have created this detailed regulation surrounding what it means for generic skills to be taught. Thus, it is ultimately the institutions themselves that have transformed the question of what it means to teach a student to think into a purely practical and legal question, namely, how the teacher can ensure that the student achieves the objectives of the course syllabus.

## **Conclusion**

In one sense, the Bologna Declaration's vision of a transformation towards equalization has been achieved in consultation with the different countries' educational institutions. The various universities have themselves formulated the directives that aim to create transparency and comparability. What is striking, however, is that this discussion was never conducted in relation to the Higher education institutions' own enquiries about the quality, task or purpose of higher education. Nor was it discussed how to understand the task of teaching people to think. No one seems to have asked the question whether thinking is something that can be captured and allowed to be defined in the examinable active verbs such as "describe", "compare", "justify", "analyze", etc. Instead, existing directives are accepted as legal documents that must be adhered to.

By formulating the internal documents based on legal positions and pedagogical taxonomies, contending understandings of thinking that, for example, Kierkegaard and Arendt, with the help of Socrates, reveal have simply been erased. It is also difficult to see how such an understanding of thinking could be captured or formulated as a generic skill or an examinable course goal. Rather, the uncritical acceptance of the taxonomies' presentation of thinking as skills has led the universities to end up in the very situation that Arendt warned about: thinking has now been reduced to the handmaiden of knowledge.

The establishment of the university was to safeguard the freedom of thought. Universities have traditionally been places that not only gather and teach knowledge, but also rely on leaving room for unruly or disobedient thinking that can challenge and question current politics, norms and ideas. For this reason, universities have also often been threatened by various men of power who wanted to curb such disobedient thinking and instead emphasise the role of thinking as the handmaiden of knowledge. We also see these threats today. But not just from power-hungry politicians. The threat also consists of the university's own researchers and teachers who, in a world of growing demands for transparency and documentation, risk turning themselves into bureaucratic henchmen, incapable to think.

Finally, I would like to remind of the original Bologna Declaration's invitation to the European higher education institutions to actually participate in its transformative work. In recent years, this involvement has mainly been characterised by teachers uncritically accepting and following internally established guidelines. There is a culture in the university of obediently bowing to these directives while bottling up one's anger and cynicism about the importance of the syllabus as an educational instrument. However, in a larger historical and political perspective, this is not an innocent act. On the contrary, it is a way of actively supporting and consolidating a legal and political tightening of university freedom. Teachers and university staff still have the freedom, and hopefully also the ability, as thinking individuals to approach the

declaration's call for participation. Such a thinking participation could actively relate to the question of what forms of thinking universities ought to encourage and to teach. It could also question guidelines and established visions with greater professional authority. A thinking contribution would probably quickly also come to the conclusion that administratively enunciated legal documents never can be, or try to be, a secure way of preserving or restoring academic freedom.

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# The PISA-syndrome – How the OECD has hijacked the way we perceive pupils, schools and education

*Svein Sjøberg*

**F**rom the mid 1990's, the OECD started the planning of the Program for International Student Assessment, now well known as PISA.<sup>1</sup> The first PISA testing took place early in 2000, and the results were published in December 2001. Since then, PISA results have gradually become a kind of global “gold standard” for educational quality, and educational policy has been globalized, lifted out of the domestic policy, as proudly stated by the PISA director, Andreas Schleicher in the TED-talk quoted below. The presentation is transcribed in 29 languages and has been seen by some 758 thousand viewers.<sup>2</sup>


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<sup>1</sup> This essay is partly based on Sjøberg (2019).

<sup>2</sup> Schleicher, 2013.

**PISA-leader Andreas Schleicher**  
**in TED-talk** 615,228 views

**PISA is:**  
*"really a story of how international comparisons have **globalized the field of education** that we usually treat as an affair of domestic policy"*



[http://www.ted.com/talks/andreas\\_schleicher\\_use\\_data\\_to\\_build\\_better\\_schools?language=en](http://www.ted.com/talks/andreas_schleicher_use_data_to_build_better_schools?language=en)

Figure 1: "PISA is really a story of how international comparisons have globalized the field of education that we usually treat as an affair of domestic policy." These are the very first words of PISA-leader Andreas Schleicher's TED-talk, presenting what PISA is really about.

Although the political and educational importance of PISA varies from one country to another, the results often set the scene for public debates on the quality of education. PISA league tables are widely published in mass media, and also used by politicians and educational authorities. In many countries, educational reforms are launched as direct responses to the PISA results.

The testing takes place every three years, and when results from PISA 2015 testing were published in December 2016<sup>3</sup>, we now have data from six rounds of PISA. The seventh PISA testing took place in April 2018, and new rounds of PISA are already under preparation, with new aspects to be included, in addition to the core domains: reading, mathematics and science.

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<sup>3</sup> OECD, 2016b, 2016c.

The intentions of PISA are, of course, related to the overall aims of the OECD and its commitment to a competitive global free market economy. PISA was constructed and intended for the 30+ industrialized and wealthy OECD countries, but has later been joined by a similar number of countries and "economies". When PISA is presented, its importance is stated by claiming that participation "make up nine tenths of the world economy"<sup>4</sup>. This is a most telling way of counting pupils, but it indicates the focus of the PISA-project: the economy. It seems "common sense" that high scores on reading, mathematics and science are predictors for the country's future economic competitiveness. Hence, bad rankings on PISA are assumed to be bad signals for the future of the country. This, and the status and authority the OECD, is part of the explanation for the public and political obsession with PISA.

Tables of country rankings on PISA scores are often taken at face value, not only in the media, but also by policy makers and politicians. The PISA undertaking is a well-funded international "techno-scientific" machinery, undoubtedly the world's largest empirical study of schools and education. Estimates suggest that the annual cost is around 80 million USD<sup>5</sup>. This amount does not include the costs of involving half a million students, tens of thousands of schools and their teachers. Given the underlying agenda, its size and importance, PISA has to be understood not just as a study of student learning. PISA has to be understood as a social phenomenon in a wider political, social and cultural context, and as a normative instrument of educational governance.

PISA rankings create panic and discomfort in practically all countries, also in high-scoring countries.<sup>6</sup> This produces an urge

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<sup>4</sup> OECD, 2010a, p. 3.

<sup>5</sup> PISA-leader Schleicher in interview, Sydney Morning Herald, Nov 29th 2013.

<sup>6</sup> Alexander, 2012.

for politicians and bureaucrats to do "something" to rectify the situation. But PISA cannot, by its "snapshot" research design, say anything about cause and effect. Hence the creativity in interpretations blossoms and educational reforms that are not at all empirically founded are introduced, often overnight.

This essay presents a short history of the increasing importance of education in the policies of the OECD, leading to the launch of its PISA-project. It also presents critical points of two categories. The first relates to the PISA project as such. Some problems are inherent in the PISA undertaking, and hence cannot be "fixed". It will be argued that it is impossible to construct a common test that in a fair and objective way can be used across countries and cultures to assess the quality of learning and teaching. Problems also arise when the categories and intentions of the PISA framework are translated to concrete test items to be used in a great variety of languages, cultures and countries. The requirement of "fair testing" implies by necessity that local, current and topical issues must be excluded. This runs against most current thinking in e.g. science education, where "science in context" and "localized curricula" are ideals promoted by e.g. UNESCO, educators as well as in national curricula.

The second category of critical points relates to some rather surprising and problematic results that emerge from analysis of PISA data: It seems that pupils in high-scoring countries also develop the most negative attitudes to the subject. The data shows that PISA scores are unrelated to public spending on education, time spent on the subject, class size etc. PISA scores are negatively related to the use of active teaching methods, inquiry based instruction and the use of ICT. Whether one "believes in PISA" or not, such results need to be discussed.

There is a widespread critique of many aspects of PISA in academic articles, and from many different disciplines. The alliance between PISA and Pearson Inc, the largest global providers of educational services and products, is a matter of

grave concern for Education International<sup>7</sup>. EI is, according to their web site "a Global Union Federation that represents organizations of teachers and other education employees"<sup>8</sup>. Education International is concerned about how PISA is used to further commercialization and privatization of national school systems.

In the last part of the essay I look at how the OECD uses PISA as an instrument of power in well-planned media-oriented reports and release of results. The normative power is exerted through seemingly neutral and objective numbers, statistics, rankings and indicators. In reports and recommendations they celebrate "successful" examples for teaching and learning, for schools and school systems, suggesting that they should be copied. The very simple definition of educational "success" is high (or increasing) score on the PISA test, which is assumed to be an objective overall measure of educational quality.

## **PISA's problematic characteristics**

The PISA project is a large undertaking. It has many of the characteristics of what is called "big science" and "technoscience": It is costly and involves the cooperation of research groups, external consultants, commercial providers as well as policy-makers in around 70 countries. The logistics of the project is complicated, and there are piles of documents with detailed instructions to the national groups who are responsible in the participating countries. Hundreds of experts from several fields of expertise are involved, contracts with subcontractors are given by bids, thousands of schools and teachers, nearly half a million of students spend 2½ hours answering the test and the questionnaire, data are carefully coded by thousands of specially trained markers. Finally, data are submitted to the organizers,

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<sup>7</sup> Education International, 2016.

<sup>8</sup> <https://www.ei-ie.org/>, accessed Dec 15th 2018.

cleaned and verified, and then, by a complicated process converted to the scores that are published.

In this section we go in some detail about what PISA claims to measure and the long road from intentions to the actual test. We also raise concerns about some problematic and surprising PISA results that often are neglected when the public focus is on "the results": league tables of PISA-scores and country rankings.

## Claims, framework and test items

### *What does PISA claim to measure?*

The official statements about what PISA measures are in many ways confusing, even contradictory. In some places the PISA reports explicitly declare that they do not measure school knowledge or competencies acquired at schools, in other places they state that they actually do measure the quality the nations' school system.

Let us consider some details. The overall aims of PISA were stated already in 1999, before the first PISA testing took place in 2000. These are the first words in the presentation of the ideas behind PISA:

How well are young adults prepared to meet the challenges of the future? Are they able to analyse, reason and communicate their ideas effectively? Do they have the capacity to continue learning throughout life? Parents, students, the public and those who run education systems need to know.<sup>9</sup>

These exact words have been repeated in practically all PISA reports from the OECD over the years since then. In other parts of their reports, they are more modest. They stress that PISA scores do not actually provide measures the quality of education

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<sup>9</sup> OECD, 1999, p.11.

systems, but the collective results of school, home and social environment.

PISA is explicit that they do not measure according to national school curricula, but based on the framework made by the OECD-appointed PISA experts.<sup>10</sup> The PISA Technical Reports clearly state that the knowledge and skills tested on PISA "are defined not primarily in terms of a common denominator of national school curricula but in terms of what skills are deemed to be essential for future life."<sup>11</sup> The same report also states that items that are close to the curriculum and items with "school science" are excluded.

So, although PISA states that it does not test school knowledge, and that it does not test according to national curricula or testing school knowledge, the PISA results are presented, also in OECD reports, as valid measures of the quality of national schools systems, and the PISA reports are packed with policy recommendations regarding schools and educational governance.

### *Constructing PISA: Crucial choices*

The process from the PISA ambitions to the actual tests that the students get has several stages, each of them with serious obstacles where many decisions have to be taken. The first step from the overall intentions behind PISA to the actual test is of course the selection of the knowledge domains (or school subjects) that should be included. OECD chose three domains ("literacies") for the PISA testing: reading (in mother tongue), mathematics and science. These are important and basic subjects, of course, but one should keep in mind that most domains are not included.

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<sup>10</sup> OECD, 2016a.

<sup>11</sup> OECD, 2009, p.11.



Of course, a test like PISA cannot embrace all possible school subjects, but by selecting some and ignoring others, they pass a message to the public as well as politicians about what is important for schools and for future life. The actual choice of reading, science and mathematics, of course, reflects the basic purpose of OECD; the concern for economic competitiveness in a global, high-tech market economy. When PISA in 2012 extended its repertoire, the new domain was "financial literacy" a school subject that does not exist in the majority of countries.<sup>12</sup> Not all countries included this option in their PISA testing.

### *The PISA framework*

The next step in the process towards the actual PISA test is to make a testing framework for the chosen domains, in reality a "PISA curriculum". Here the experts come in. Key external institutions (who win the bid) and their selected subject matter specialists are in charge of a lengthy process to develop this framework. The academics selected for this purpose are well known international experts in their fields. But, of course, they work within the politically decided frames decided by PISA as a project, and they must all be fluent in English, the working language in all deliberations and working documents. In addition to the subject matter specialists, psychometricians who are experts on statistical measurements play a key role in the whole process.

Most educators will probably find the PISA frameworks developed by these expert groups to be most interesting, with ideas, perspectives and subject matter details that are of very high quality.<sup>13</sup>

These documents could be used as sources for inspiration to make national curricula and to stimulate the debate over

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<sup>12</sup> OECD, 2013.

<sup>13</sup> See, e.g. OECD, 2016a.

educational priorities. The problem is, however, that this framework now serves as a normative global curriculum and a framework for an international testing regime that claims to measure the quality of the entire education system in all countries.

As for the chosen contents, it is noteworthy that neither the UN Millennium Goals nor the current UN Sustainable Development Goals and the related initiatives for ESD (Education for Sustainable Development) are mentioned, even in the PISA 2015 assessment framework.<sup>14</sup> This is a manifestation of how the OECD has different educational priorities than those agreed upon by the UN and its sub-organizations UNESCO, UNICEF, UNEP and UNDP.

### *Uncertainties, errors and bias in PISA scores*

PISA scores are estimates of population "real scores" based on data from a sample of respondents. Results are published with error bars due to this sampling error. Typical sampling errors in countries' mean score are around 5 PISA points. Having this in mind, we immediately see that the actual ranking of countries has little meaning for many countries in middle range. Mean differences between e.g. rank 6 and 12 are often not statistically different.

But there are other sources of error that are not well communicated. Wuttke studied the uncertainty and bias in German PISA results in detail, and he notes that Statistical significance criteria of OECD/PISA are misleading because several sources of systematic bias and uncertainty are quantitatively more important than the standard errors communicated in the official reports.<sup>15</sup>

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<sup>14</sup> OECD, 2016a.

<sup>15</sup> Wuttke, 2007.

The real uncertainty of PISA scores are likely to be substantially larger than what is published, especially when we look at the measurement of trends, i.e. changes from one PISA-round to the next. Some items are kept unchanged from one round of PISA to the next, and these rather few "link items" are used for the calculations of trends. These errors are documented in the technical reports, but do not appear in the PISA presentation of results in the main reports.<sup>16</sup>

It is also important to keep in mind that the target population of the PISA testing is the 15-year olds who attend school. In many cases this is not the whole age cohort. When PISA-leader Andreas Schleicher<sup>17</sup> on BBC presents Vietnam as a "stunning school success" based on PISA-scores, he ignores the fact that only 56% of their 15 year age cohort attend schools and are eligible for the PISA sample.<sup>18</sup> Similar errors and superficial readings are also made when Chinese schools are judged by the results of e.g. Shanghai, as is also often done. It has been documented that the Shanghai sample does not at all represent the population of 15-year old in Shanghai. About a third of Shanghai's 15-years olds are excluded from the test, a fact that was for a long time denied by the PISA organizers. And of course, Shanghai does not in way represent China as a whole, no more than Boston represents the USA.

Scholars who have looked into the details of this issue, comment:

In PISA 2015, when Shanghai was combined with other Chinese sub-national education systems, science performance was not significantly different from that in the United Kingdom, Slovenia, or Australia, among others.<sup>19</sup>

A neglected source for uncertainty and bias is the exclusion rate, the per cent of students that are exempt from the population. For

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<sup>16</sup> E.g. OECD, 2016b, 2016c.

<sup>17</sup> Schleicher, 2015.

<sup>18</sup> Sellar, Thompson & Rutkowski, 2017.

<sup>19</sup> Sellar, Thomson & Rutkowski, 2017, p.32.

most OECD-countries, nearly all 15-year olds attend school, and hence are part of the target population to be sampled for testing. But also in these countries, some students are excluded from the test for reasons that make them unfit for the test. If these students had been tested, it is most likely that they would be low-scorers and hence lower the population means.

There are strict rules for the exclusion procedures. Still, we see that the exclusion rate varies substantially between countries and over time for the same country. Changes in exclusion rate over time distort the resulting PISA score and how they be compared between countries. They also mislead measures of national trends. In Norway, the exclusion rate was 2,7 % in the first PISA round, but was more than doubled (6,7 %) in 2015.<sup>20</sup> Allegedly mediocre results in PISA 2000 created a "PISA shock" in Norway and paved the way for profound educational reforms. Fifteen years later, the government celebrated PISA 2015 as a success for this reform. In fact, if corrected for the increased exclusion rate, the Norwegian results were more or less identical in 2000 and 2015.

When measuring trends, it is of course also essential that we measure the same each time. But the definitions of the three PISA "literacies" have actually changed over time. The definition of science literacy in 2015 is for instance rather different from the definition used in 2006, when science was the main subject.<sup>21</sup> If you want measure change, you simply cannot change the measure!

### *A universal test for "real life" challenges?*

A fundamental premise for the PISA project is that it is possible to measure the quality of a country's education by indicators that are universal, independent of school systems, social structure,

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<sup>20</sup> Kjærnsli and Jensen, 2016, p.18.

<sup>21</sup> OECD, 2006, 2016a.

traditions, culture, natural conditions, ways of living, modes of production etc.

As noted, PISA claims that they measure “how well the young generation is prepared to meet the challenges of tomorrow’s world”. Such an ambition assumes that the challenges of tomorrow’s world are already known and that they are more or less identical for young people across countries and cultures. Although life in many countries have similar traits, one can hardly assume that the 15-year olds in for instance USA, Japan, Norway, Turkey, Mexico, and Germany face the same challenges and that they need identical and measurable skills and competencies in their future life.

One should also keep in mind that the PISA framework and its tests are meant for the relatively rich and modernized OECD-countries. When this instrument is used as a "benchmark" for educational standard in the 35 non-OECD countries that take part in PISA, the mismatch of the PISA test with the needs of the nation and its youth becomes even more obvious.

The ambitions of PISA are great, but are contradicted by the very format of the testing: The PISA test is a pen-and-paper test (from PISA 2015 computer-based in 58 of the 72 participating countries), where students sit for 2 hours to answer written questions, in solitude and without access to sources of information. How much does this test situation resemble “real life” and relate to the challenges that young people may face in their future life as citizens, as participants in tomorrow’s democracy and as skilled workforce? Put in this form, the questions are rhetorical: the PISA test situation does not resemble any real life situations. The only place where you sit in solitude with a written test is in fact in exams at schools and universities. The only places where you are not allowed to communicate with others or allowed to use modern information technologies are similar test situations.

Real life, in private, at leisure as well at the workplace, is more or less the opposite of the PISA test situation. While one should

expect that an organization like OECD should stress the competencies needed by the big international actors on a competitive global market, the PISA test situation is different. Therefore, PISA does hardly live up to serve the political/economical goals of OECD.

### *PISA item selection and test construction*

Once the framework is constructed, the next step is to “operationalize” it, i.e. to use the framework for the development and selection of test items, and for the construction of the PISA test as a whole. This complicated process is described in the voluminous technical reports.<sup>22</sup> These reports are often published more than a year after the release of the PISA results, an important issue that has received serious critique from scholars.<sup>23</sup>

Elements in the item selection process are the following. Each PISA country (OECD countries only) is invited to submit test items that fit the framework and are based on “authentic texts” for “real life situations”. Through a complicated process with initial screening and selection, national and international piloting, pre-field trials, main field trial round and psychometric analysis that involve many actors and subcommittees and many meetings for negotiations and debate, the final series of test items is decided.

A logical consequence of wanting to make a fair international test is that an item cannot be used if it behaves in an “unfair” fashion. While this is a sensible argument from a statistical point of view, it also implies that items that are too close to real life contexts of some countries, but not in others, have to be removed. Other principles for exclusion are described as follows.

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<sup>22</sup> See e.g. OECD, 2009.

<sup>23</sup> Rutkowski & Rutkowski, 2016.

The main reasons for assessing units as unsuitable were lack of context, inappropriate context, cultural bias, curriculum dependence, just school science and including content that was deemed to be too advanced.<sup>24</sup>

This clearly states that test units (items) that relate to issues that are considered “inappropriate” (controversial in a particular country), has a “cultural bias” (be it positive or negative), or is close to the school curriculum (in some countries but not in others) were excluded. The statement also explicitly states that items that are “just school science” should be excluded. This is, again, a clear statement that PISA does not measure school knowledge or issues related to school curricula. From the above it seems somewhat strange that such a test is used to judge the quality of science taught at school in each country.

In reality, the test items in the final test are decontextualized, or the context is contrived or historical. Not by the intentions in the testing framework, but based on statistical necessity and concern for “fairness”. This runs contrary to recommendations by educators as well as by many national curricula of promoting a curriculum that is relevant, interesting and context-based, at least for the compulsory school level.

### *Item text, language and translation*

A further set of complications arise related to item texts, language and translation. PISA test units are often based on rather lengthy texts that constitute the stem, called “stimulus”. The intention is positive, namely to present real, authentic texts in real-life situations. But this format, in particular the length and complication of the stimulus text, also make the PISA items rather different from most tests that are commonly used in school mathematics and science. The verbal test structure distinguishes PISA from for instance TIMSS (Trends in Mathematics and Science Study), the other large-scale study of science and

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<sup>24</sup> OECD, 2009, p.34.

mathematics achievement. The weight on text is, of course, a deliberate choice by PISA specialists, and it also underlines that PISA does not really test subject matter and school knowledge.

It is often claimed that many PISA items are testing reading skills rather than science and mathematics competencies. The fact that PISA score for most countries are similar on the three domains, support this claim. Correlations between individuals' PISA score on reading, mathematics and are in the range of 0.77–0.89 and rather similar in all countries,<sup>25</sup> which essentially tell us that they measure more or less the same "thing" or construct. PISA items in later PISA versions have become shorter and may indicate that this critique has been taken seriously.

A robust finding in PISA and other reading tests, like PIRLS (Progress in International Reading Literacy Study), is that girls outperform boys in reading in all countries. However, PISA test scores in science and mathematics show a gender pattern that is different from for instance TIMSS results. The gender pattern of PISA also differs from other tests, like national exams, where boys often outperform girls in science and mathematics. This unusual gender pattern may, at least partly, be explained by the heavy reading load in many PISA items.

The “authentic texts” which constitute the stimulus in each item have originated in a certain situation in one of the OECD countries, and, of course, in the language of that country. This text is, if accepted, then translated into the two official PISA languages before submission to the PISA organizers. The item is then translated into the language of each of the participating PISA countries. This translation process follows strict rules that are laid down in detailed instructions.<sup>26</sup>

This translation raises many questions. Thorough work on the PISA reading test items has been done by Arffman, in her PhD as

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<sup>25</sup> OECD, 2005.

<sup>26</sup> See e.g. OECD, 2009.



well as in journal papers.<sup>27</sup> She provides a detailed text-analytical study of the translation from English to Finnish of three PISA items. Her studies reveal many critical dimensions in this process. One of her conclusions is that one can never arrive at what may be called “equivalence of translation”. She also notes the scarcity of research on this most important issue. Neither poetry nor good prose can be translated according to a formalized set of rules, a fact that all good translators will acknowledge.

Another study of the translation and adaptation (called "transadaptation") of PISA science items in English, French and Arabic illustrate the challenges associated with the transadaptation and concludes that:

Cross-cultural comparisons rely on the assumption that transadapted versions of the same test place similar language demands on examinees. However, even when the quality of transadaptation is not a concern, bias at some level is inevitable.<sup>28</sup>

Based on their analysis, they conclude that the transadaptation "may impose different cognitive demands on examinees in different countries, thereby raising concerns regarding the fairness of international comparisons and some of the conceptual underpinnings of the enterprise." <sup>29</sup>

Professor Harvey Goldstein, a highly respected senior in educational measurement, raises serious concerns about how the OECD underplays the sources of systematic errors that are due to issues of translation. He provides concrete examples of the how his plays out in detail. After reviewing translation issues and other sources of errors and uncertainty his concluding remarks about PISA are unforgiving:

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<sup>27</sup> Arffman, 2007, 2010.

<sup>28</sup> El Masri, Baird & Graesser, 2016.

<sup>29</sup> El Masri, Baird & Graesser, 2016.

Unless OECD changes its focus so that its studies abide by accepted rules for scientific enquiry, it is difficult to see a good case for the continuation of such studies.<sup>30</sup>

## **Problematic results and growing critique – is PISA off target?**

### *Money spent on education: no influence?*

Already from the first PISA round, the OECD produced graphs that showed small or negligible correlations between a country's PISA scores and its spending on education.<sup>31</sup> This, of course, has been discovered and used by politicians world-wide, and the OECD advice that more spending on education will not improve the quality.

More concretely, it is in particular interesting to note that in the five Nordic countries, the relationship between public spending and PISA scores is actually strongly negative. Finland, for instance, is highest in PISA score, but lowest in spending. These relationships are used in political debates in various ways: Finnish teachers have difficulties in asking for higher salaries, more funding or other changes, since they already are on top of the rank. Norway, on the other hand, has been much lower on the PISA ranking, but with higher public spending on schools. Based on PISA, Norwegian politicians have argued that it has been "proved" that more spending would not increase the quality of schools.

PISA findings on cost and funding, like the above, are frequently used in influential OECD publications, like the annual *Education at a Glance*. They conclude that "averaged across OECD

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<sup>30</sup> Goldstein, 2017.

<sup>31</sup> OECD, 2001.

countries, there is potential for reducing inputs by 30.7 % while maintaining outputs constant."<sup>32</sup>

*PISA science scores correlate negatively with interests and attitudes*

PISA scores are often presented as league rankings between countries, with the winners on top and the losers at the bottom. But PISA also has many questions about attitudinal aspects of how young people relate to science. This was an important element of the PISA 2006 study, when science for the first time was the core subject. The definition of science literacy in PISA 2006 actually included “willingness to engage in science-related issues, and with the ideas of science, as a reflective citizen”.<sup>33</sup> A special issue of *International Journal of Science Education*<sup>34</sup> presents several interesting results from analysis based on these data.

The possibly most surprising finding is that many countries with the highest mean PISA science score were at the bottom of the list of students’ interest in science.<sup>35</sup> Finland and Japan are prime examples: at the top on PISA science score, and at the very bottom on constructs like “interest in science”, “future-oriented motivation to learn science” as well as on “future science job”, i.e. inclination to see themselves as scientists in future studies and careers. In fact, the PISA science score correlates negatively with Future science orientation ( $r = -0.83$ ) and with Future science job ( $r = -0.53$ ).<sup>36</sup>

It should be noted that the above negative relationships are when countries are the units of analysis. When individual students

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<sup>32</sup> OECD, 2007, p.16.

<sup>33</sup> OECD, 2006.

<sup>34</sup> *International Journal of Science Education*, 2011, vol, 33, No1.

<sup>35</sup> Bybee & McCrae, 2011.

<sup>36</sup> Kjærnsli & Lie, 2011.

within each country are the units, some of the correlations are positive.

Such findings are most disturbing for educators who want to base their work on evidence and research. If the students in PISA top ranking countries leave compulsory school with strong negative orientations towards science, one needs to step back and think about the reasons for this as well as the possible consequences. Care should be taken not to interpret correlation as cause and effect, but one should at least think twice before using these countries as educational models and ideals to be copied.

In an analysis of the PISA 2015-data Zhao points out that students in the so-called PISA-winners in East-Asia (e.g. Japan, Korea, Hong Kong, Singapore) seem to suffer from what he calls "side-effects" of the struggle to get good marks and tests-scores.<sup>37</sup> He presents the PISA-data that show that students in these countries get high scores but have very low self-confidence and self-efficacy related to science and mathematics. He points out that

There is a significant negative correlation between students' self-efficacy in science and their scores in the subject across education systems in the 2015 PISA results. Additionally, PISA scores have been found to have a significant negative correlation with entrepreneurial confidence and intentions.<sup>38</sup>

One should also note that many of the winners in the PISA science score also have the largest gender differences in PISA score. Finland is a prime example. Finnish girls strongly outperform boys on all three PISA subjects. In reading literacy, the difference in means is about 50 % of a standard deviation. Again, such findings from PISA should call for some caution against trying to copy the "PISA winners".

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<sup>37</sup> Zhao, 2017.

<sup>38</sup> Zhao, 2017.

### *PISA scores correlate negatively with inquiry-based teaching*

The concept of science as inquiry has a long history and has in recent years been lifted as if it was a newcomer. IBSE (inquiry-based science education) is now an often used acronym, and is the key recommendation in the influential EU-document "Science Education Now".<sup>39</sup> The term IBSE has been adopted as the key concept in calls for EU-funding in the Horizon 2020-program.

In PISA 2015, where science was again the core subject, nine statements in the student questionnaire constitute an Index of inquiry-based teaching. Some of the statements are these: "Students spend time in the laboratory doing practical experiments"; "Students are required to argue about science questions"; "Students are asked to draw conclusions from an experiments they have conducted"; "Students are allowed to design their own experiments" and "Students are asked to do an investigation to test ideas".<sup>40</sup>

Among the interesting findings is that in most of the "PISA-winners" (Japan, Korea, Taiwan, Shanghai, Finland) students report very little use of inquiry-based teaching. For the variation within the same country, the PISA finding is that "in no education system do students who reported that they are frequently exposed to enquiry based instruction [...] score higher in science."<sup>41</sup>

But, although the relationship between IBSE and PISA test score is negative, IBSE relates positively to interest in science, epistemic beliefs and motivation for science-oriented future careers:

However, across OECD countries, more frequent enquiry-based teaching is positively related to students holding stronger epistemic

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<sup>39</sup> EU, 2007.

<sup>40</sup> OECD, 2016c, p.69.

<sup>41</sup> OECD, 2016c, p.36.

beliefs and being more likely to expect to work in a science-related occupation when they are 30.<sup>42</sup>

One of the questions in the Inquiry Index may be of special interest. Experiments play a crucial role in science, and have always played an important role in science teaching at all levels. But when it comes to PISA, the report states that: "activities related to experiments and laboratory work show the strongest negative relationship with science performance".<sup>43</sup>

Key concepts and acronyms in current thinking in science education are well known: science in context, inquiry-based science education (IBSE), hands on-science, active learning, NOS (nature of science), SSI (socio-scientific issues), argumentation, STS (Science, Technology and Society). There seems to be no evidence from PISA to back up such advice, PISA rather provides counter-evidence.

The conflict between the recommendations and priorities of scientists as well as science educators on the one hand, and PISA results on the other hand is most problematic. The somewhat provoking question then becomes: Should we sacrifice Inquiry-Based Science Education to climb on the PISA rankings?<sup>44</sup>

### *PISA scores correlate negatively with the use of ICT*

In a special OECD/PISA report on the use of computers in teaching and learning,<sup>45</sup> the highlighted conclusions are strikingly clear:

**What the data tell us.** Resources invested in ICT for education are not linked to improved student achievement in reading, mathematics or science. [...] Limited use of computers at school may be better than no use at all, but levels of computer use above

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<sup>42</sup> Ibid.

<sup>43</sup> OECD, 2016c, p.71.

<sup>44</sup> Sjøberg, 2018.

<sup>45</sup> OECD, 2015a.

the current OECD average are associated with significantly poorer results.<sup>46</sup>

In spite of these clear findings, many countries strongly promote more ICT in schools in order to climb on the PISA rankings. This is just one example of the selective readings of PISA results to justify reforms and initiatives.

### *Critique from academics*

In parallel with the increasing global influence of PISA on educational debate and policy, there has been a growing critique in the academic world. Several readable anthologies have been published.<sup>47</sup> The authors come from many countries and many academic fields and include well-known philosophers, sociologists, economists and educators.

In May 2014, a group of these and other academics sent an open letter to Andreas Schleicher, head of PISA and Director for Education and Skills in OECD. In the letter they voice a series of concerns about the growing influence of PISA.<sup>48</sup> They argue that PISA is killing the joy of learning and lead to the detriment of basic values that schools should strive for. This initiative received public attention, also through coverage in *The Guardian* and other news media worldwide. The open letter has later been signed by more than 2000 academics from about 40 countries. Behind the initiative we find leading educators like Stephen Ball, David Berliner and Robin Alexander. Noam Chomsky is also behind this initiative, likewise Diane Ravitch, who was previously U.S. Assistant Secretary of Education, appointed to public office by Presidents George H. W. Bush and Bill Clinton. She is now, as distinguished professor of history and philosophy of education, the most influential critic of the market-driven education policies she earlier had a strong belief in. She is the

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<sup>46</sup> Ibid., p.146.

<sup>47</sup> Hopmann et al., 2007; Pereyra et al., 2011; Meyer & Benavot, 2013.

<sup>48</sup> Meyer et al., 2014.

author of several influential books; the best known is *The Death and Life of the Great American School System with the telling subtitle How Testing and Choice Are Undermining Education*.<sup>49</sup>

In an article in the prestigious *Journal Educational Researcher* Rutkowski and Rutkowski give several examples of how the PISA project has weaknesses and shortcomings that are not communicated, and that their conclusions and recommendations are doubtful.<sup>50</sup> They make a "call for a more measured approach to reporting and interpreting PISA results".

It seems fair to say that the criticism of PISA and the way it is used and abused is widespread among academics concerned about schooling and education. This critique has increased over time, also because PISA is extending its scope and influence in several ways. I will return to this point towards the end of the essay.

## Politics and global educational governance

As noted in the Introduction, the OECD leader, Andreas Schleicher is proud to announce that PISA has globalized educational policy.<sup>51</sup> More concretely, an OECD Education Working Paper provides details of the normative effects of PISA. The report states, as its main finding, that

PISA has been adopted as an almost global standard, and is now used in over 65 countries and economies. [...] PISA has become accepted as a reliable instrument for benchmarking student performance worldwide, and PISA results have had an influence on policy reform in the majority of participating countries/economies.<sup>52</sup>

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<sup>49</sup> Ravitch, 2011.

<sup>50</sup> Rutkowski & Rutkowski, 2016.

<sup>51</sup> Schleicher, 2013.

<sup>52</sup> Breakspear, 2012.



This report reviews literature as well as results from questionnaires to key policymakers and other officials, and provide a ranking (!) of the impact that PISA has had on all OECD countries. The report informs that even "high-performing countries such as Korea and Japan have enacted reforms in response to a large range of PISA results."<sup>53</sup>

As noted, we have for at least 50 years had international studies of student achievement, mainly in the same domains that PISA addresses, like TIMSS and its predecessors from around 1960. These studies have had an influence on educational debates and policies in many countries for decades. But the scene changed dramatically when the OECD had launched its PISA-project. By now (spring, 2019), after six released rounds of PISA testing, the other international achievement studies play a much smaller role in most countries, although some of these studies, like TIMSS (Trends in Mathematics and Science Study), actually measure knowledge that explicitly is aligned with curricula, and much closer to what is taught in schools.

So why has the PISA program become so powerful and influential? Why was PISA launched and how is the power and influence exerted? In the following, we briefly consider these most important questions.

## **OECD and emergence of PISA**

The OECD has developed since the end of WW2. It started in 1948 under the name of OEEC (Organization for European Economic Cooperation) as a part of the US-driven Marshall Plan to rebuild the European economy after the war. The member states were 18 countries in Western Europe. The key point was to promote and support a free market, capitalist economic system. An obvious agenda was to provide a defense against communism and the influence from the Soviet Union.

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<sup>53</sup> Ibid.

Over the years, the OEEC widened the scope of its activities as well as the membership. In 1961 it changed the name to OECD (Organization for Economic Cooperation and Development). The present (2018) OECD has 35 memberstates, most of them with well-developed economies. Most of the former East European countries joined in 1997. Russia did not join, but has close working relationship with the OECD, and also takes part in PISA.

The PISA home site states that "*the OECD brings around its table 39 countries that account for 80% of world trade and investment, giving it a pivotal role in addressing the challenges facing the world economy*".<sup>54</sup>

From the 1960s, the OECD gradually increased its interest in Human Resources (HR) as a key factor in economic development, with the emphasis on training of a skilled workforce, in particular technical and scientific personnel. A key person in this development was the Norwegian economist Kjell Eide, who for a period also was Secretary of Education in a government for the Norwegian Social Democratic Party (Arbeiderpartiet). Kjell Eide was central in the development of the educational involvement of the OECD in period from the early 1960s, also as chair of The Centre for Educational Research and Innovation (CERI). He has written in detail about the gradual growth of OECD's engagement in education, a history that he summarizes and reflects upon in the book he wrote when he left the OECD.<sup>55</sup>

He describes the political debates and how various positions on the role and importance of education competed in the OECD and its various sub-committees. While some countries argued for the importance of a broad-based curriculum with a weight on human development, others were more oriented towards a more

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<sup>54</sup> <http://www.oecd.org/about/history/>, accessed 12 February 2019.

<sup>55</sup> Eide, 1995.

instrumental role of education: the development of skills for the labour market.

Eide describes how the OECD gradually developed to become an important provider of educational statistics of high quality. He notes how the US representatives in particular pushed the issue of including also measures of the output of schooling in the form of comparable learning outcomes in these statistical measures. By having measures on the quality of output from education, and not just input, one could provide data that could describe the efficiency and productivity of school systems. The issue of "school efficiency" became a contentious issue in the debates in the OECD. Eide writes:

In the 1980s, in particular the US, aggressively put forward more conservative political ideas on the OECD's educational agenda: quality in education, free school choice, new modes of financing, cooperation with industry and commerce, accountability, efficiency in use of resources, performance pay etc.<sup>56</sup>

Eide also notes that:

The ambitions may be that the OECD takes the responsibility to arrange international tests and examinations (like TIMSS) on behalf of the governments. [...] If so, this will make the OECD to a strong instrument of power, and will contribute to a harmonization that will exceed everything that we have feared from the EU.<sup>57</sup>

This was written just two years before the planning of PISA commenced. One may argue that Eide's fears have fully been realized. In the first report from PISA/OECD, the joint commitment of the OECD "owners" was clearly stated:

PISA represents a new commitment by the governments of OECD countries to monitor the outcomes of education systems in terms

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<sup>56</sup> Eide, 1995, p. 95, author's translation.

<sup>57</sup> Ibid., p. 104.

of student achievement, within a common framework that is internationally agreed.<sup>58</sup>

This was written a year before the first PISA testing, and indicates the intentions and ambitions of the PISA undertaking. In later reports, the normative nature of PISA is even more explicit. The PISA 2009 report states in the Introduction that "*PISA [...] provides a basis for international collaboration in defining and implementing educational policies*".<sup>59</sup>

The political and normative nature of PISA is well described by Ulf Lundgren, a Swedish professor in the field of educational philosophy and educational policy. Following Kjell Eide, Lundgren played an important role in the OECD's work in education. Lundgren has undertaken evaluations of education systems in many countries, and worked for the European Commission, UNESCO, OECD and the World Bank. He was also Director-General of the Swedish National Agency for Education 1991-2000. In the same period he played a key role in the discussions in the OECD leading up to the launch of PISA in 2000. More than a decade later, he reflects on "PISA as a political instrument".<sup>60</sup>

The outcomes of PISA we hoped could stimulate a debate on learning outcomes not only from an educational perspective but also a broad cultural and social perspective. Rarely has a pious hope been so dashed.[...] When the first results came they got an impact that was not expected, not even dreamed of.<sup>61</sup>

Lundgren ends his article by concluding that:

PISA is an example of what in a global world nationally is perceived as the answer to what is going to be taught, who it is

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<sup>58</sup> OECD, 1999, p.11.

<sup>59</sup> OECD, 2010a, p.3.

<sup>60</sup> Lundgren, 2011.

<sup>61</sup> Lundgren, 2011, p.27.

going to be taught and how will the outcomes of teaching be judged and used for control and political governing.<sup>62</sup>

## The power and status of the OECD

The prime concern of the OECD is to promote economic development in a free market. The priorities and activities of the OECD are decided by committees with representatives for the member states' governments. Hence, the OECD has a status that is very high. They provide policy advice and expert reviews regarding the economy, the labour market and other fields. These reports and advice are taken as objective, scientific and neutral, and are key elements in most countries' policy development.

PISA is owned and organized by the OECD member states' governments and governed by politicians and their appointed bureaucrats. The PISA Governing Board is composed of representatives of OECD members, clearly expressed the following way: "*Representatives are appointed by their education ministries. [...] The Board determines the policy priorities for PISA and makes sure that these are respected during the implementation of each PISA survey*".<sup>63</sup>

This political background of the PISA programme, and OECD's mandated stress on the word *economy* distinguishes PISA from studies like TIMMS and PIRLS, which are organized by the IEA (International Association for the Evaluation of Educational Achievement). The IEA grew out of academic communities and their research interests from the early 1960s, although they often enjoyed political and economic support from governmental sources. The IEA-studies do not have the same direct commitment to political or ideological stances. In later years, however, governmental departments are IEA member institutions

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<sup>62</sup> Ibid., p.28.

<sup>63</sup> <http://www.oecd.org/pisa/contacts/pisagoverningboard.htm>, accessed 12 February 2019.

and do play a more active role in the policies of IEA, not only in the funding of their many projects.

In short: the main normative power and of PISA is due to the particular political and economic status of the OECD and its ownership by member states' governments. When PISA was introduced by the OECD, it immediately started to influence also the education sector, which was explicitly the purpose of the programme.

## **Competition, market thinking and globalization**

The PISA project should be seen as part of a wider international policy trend where concepts and ideas from the market economy are used in the education sector. Key words here are competition, success, market, and globalization. These ideas are visible in many sectors of society, also in education, and are part and parcel of the free market capitalist economic system and its underlying beliefs.

A most visible aspect of PISA is its focus on league tables and numerical scores. This creates competition, where there are winners and losers. The countries at the top are celebrated as "successful", and PISA reports hold them up as winners and models. Everything seems to centre on having success: PISA reports celebrate successful systems, successful schools, successful reformers, successful learners.<sup>64</sup> The underlying belief is that competition in a market always generates quality and leads to success. And the purpose and meaning of life is to have success and to be competitive.

As mentioned, the term New Public Management is used to describe a market driven system which is supposed to make the public sector more efficient. Terms like quality, efficiency, transparency, accountability, productivity, and "value for

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<sup>64</sup> OECD, 2010a, 2012, 2015b, 2016c.

money” are among the (often positively laden) terms that are used in these policy reforms in many public sectors. Public services like schools and higher education, culture, health and care are all being invaded by market terms. Other (previously) public sectors experience the same trend: police, security, postal services, transport, water supply, handling of household garbage, sewage and waste, water cleaning etc. Traditional public services are increasingly subjected to competitive bids where they compete with private actors. Outsourcing of key public services is an international trend, and bids are often taken over by multinational companies, a process that is eased by new regulations on international trade. This trend towards marketization and privatization characterizes the development in several countries. And the education sector is in forefront, with OECD as actor and with PISA project as an efficient tool.<sup>65</sup>

A related political/economical perspective is that of globalization. The economy is getting globalized, large multinational companies increase their influence, and the workforce has to be flexible and moveable. Hence, there is a need for common standards in education, common systems for exams, degrees and qualifications. Such tendencies operate within over-national units like the European Union, where an example is the "Bologna process" and its introduction of a common degree system in higher education. In key areas, the OECD is playing an increasingly important role by developing and monitoring common standards, indicators and measures.<sup>66</sup>

This PISA-inspired process represents a political pressure to standardize, harmonize and universalize national institutions like a country's school system and to promote competition on the global educational scene.<sup>67</sup> While most educators argue for context-based teaching and localized curricula, at least in the obligatory school age, the pressure from PISA is in the opposite

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<sup>65</sup> Meyer & Benavot, 2013.

<sup>66</sup> Grek, 2009.

<sup>67</sup> Ball, 2012.

direction. A driving force behind these reforms is often the use of indicators, quantifiable and measurable standards that can be used for calculations.<sup>68</sup> PISA test scores and rankings are ideal for this purpose, whether the researchers behind the projects like it or not.

### *Human Capital Theory: Test scores and economic prosperity*

The importance of human resources as prime drivers in the modern economy was the main reason for the OECD to focus on education. The theoretical underpinning of this is often referred to as Human Capital Theory. The competencies of the work-force in contemporary economy are considered to be even more important than other forms of capital, like machines, buildings and infrastructure. Hence, the efficient development of a productive work-force becomes a key concern for development of the economy. In this perspective, using money on education is not only for individual growth and development, but an investment that will pay off in the future of the country's economy and competitiveness.

To-day, it therefore seems "common sense" that high scores on science and mathematics tests at school are good predictors of future economic prosperity. Bad rankings on PISA are presented as bad signals for the future of the country. This postulation is probably the main reason for the extreme importance that is given to PISA results and rankings. PISA is in fact also "sold", presented and understood in this perspective.

Important underpinnings regarding the importance of education for economic prosperity are the works of Professor Eric Hanushek. He is often considered the father of the field "school effectiveness". Among his well-known assertions are that class size does not matter for the quality of teaching. He is also central

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<sup>68</sup> Popkewitz, 2011.



in the development of the highly controversial Value Added Model for calculating the "value added" effect that a school or a teacher has on student learning. Results from these calculations are used in accountability-systems in for instance the US to rank schools and individual teachers, often also determine salaries and even for firing teachers or principals if they don't "deliver" satisfactory results.

Over decades, Hanushek has published extensively on the relationship between economic investment and educational quality and is widely used by the World Bank and the OECD. With his companion, the German professor Ludger Woessman, he authored the OECD report on "The long run Economic Impact of Improving PISA Outcomes".<sup>69</sup> In this report, they provide numbers on how much each country will earn on improving the national PISA-score. They provide different scenarios for the implications of different magnitudes of PISA improvements.

Concretely, they assert that an increase in 25 PISA points (a quarter of a standard deviation) over time will increase the German GDP with 8088 million USD.<sup>70</sup> If Germany improves its PISA score to the level of Finland, they claim that *"Germany would see a USD 16 trillion improvement, or more than five times current GDP. All of these calculations are in real, or inflation-adjusted, terms."*<sup>71</sup>

In the same publication he asserts that Denmark would earn 586 billion dollars, Norway 841 billion and Sweden 1019 billion.<sup>72</sup>

These and other findings based on Hanushek's economic modelling have been strongly rejected by scholars from many academic fields. Recently, also the calculations are challenged in

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<sup>69</sup> OECD, 2010b.

<sup>70</sup> Ibid., p.23.

<sup>71</sup> Ibid., p.25.

<sup>72</sup> Ibid., p.25.

an article that claims that they are based on invalid statistics. For an academic article, the title is sharper than one often sees, even naming the target for the critique: *A new global policy regime founded on invalid statistics? Hanushek, Woessmann, PISA, and economic growth*.<sup>73</sup> The authors have used exactly the same data, and come to completely different results. The abstract in the article is strong:

Several recent, highly influential comparative studies have made strong statistical claims that improvements on global learning assessments such as PISA will lead to higher GDP growth rates. These claims have provided the primary source of legitimation for policy reforms championed by leading international organisations, most notably the World Bank and OECD. [...]

The consequence is continued utilization and citation of these strong claims, resulting in a growing aura of scientific truth and concrete policy reforms. In this piece we report findings from two original studies that invalidate these statistical claims. Our intent is to contribute to a more rigorous global discussion on education policy, as well as call attention to the fact that the new global policy regime is founded on flawed statistics.<sup>74</sup>

This gruesome critique has not been met, but informed scholars working with PISA comment that "*In any event, the truth is that even if one discredits the argument by H&W no one will really care and their work will remain relevant for those in power. It is depressing but true*".<sup>75</sup>

### *PISA, Pearson, and the market*

PISA has established a close cooperation with *Pearson Inc.*, the former owner of Financial Times, The Economist, Penguin Group and Dorling Kindersley. Pearson has expanded its activities into the education sector and has become the world's largest company for testing and education programs, with 40,000

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<sup>73</sup> Komatsu & Rappleye, 2017.

<sup>74</sup> Ibid.

<sup>75</sup> Private communication. The author prefers not to be named.

employees in more than 80 countries. 80 percent of Pearson's revenues now come from education, maybe the world's fastest growing market sector. Pearson won the bid for important parts of the PISA 2015 testing and developed strong links with OECD. Pearson has, of course, a vested interest in creating a market for its services and products. Through its close partnership with OECD it has come in a good position to expand its market as well as its influence. Diane Ravitch, mentioned above, is concerned about this influence, and expresses it this way: "*Are we prepared to hand over our children, our teachers, and our definition of knowledge to Pearson?*".<sup>76</sup>

For the PISA 2018, Pearson took an even stronger grip on PISA. A joint press release from OECD and Pearson proudly announces that:

Pearson has won a competitive tender by the OECD to develop the Frameworks for PISA 2018. [...] The frameworks define what will be measured in PISA 2018, how this will be reported and which approach will be chosen for the development of tests and questionnaires.<sup>77</sup>

This key role in PISA does not, of course, imply that Pearson's staff is doing the work. But they organize and administer the process. Pearson continues to forge personal links with countless academics in key positions and numerous representatives for national educational authorities. This contract is of course a most valuable strategic investment for Pearson. The cooperation is already in place for several bi-products, like a video series about "Strong Performers and Successful Reformers in Education".<sup>78</sup>

Many other commercial providers of educational services operate in the global market. The market is enormous, since all countries use a substantial amount of the national spending for schools and education. Commercial, private and for-profit providers take an

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<sup>76</sup> Ravitch, The Washington Post, May 7th 2012.

<sup>77</sup> Joint Press release PISA/OECD and Pearson, Dec 10th 2014.

<sup>78</sup> <http://www.oecd.org/pisa/pisaproducts/>, accessed 12 February 2019.

increasing slice of this cake. *Edu-business* has become a blooming global market, often fueled by the results of the large-scale international studies, in particular PISA. The World Yearbook of Education in 2016 had "The Global Education Industry" as its main topic.<sup>79</sup> Large portions of what used to be public services are out-sourced to commercial providers. It falls outside the scope of this essay to elaborate on this most important issue.

### *PISA: Redefining the purpose of schooling*

The most fundamental and serious influence of PISA is that it redefines the very purpose of schooling and education. PISA claims to measure skills and competencies that are important for the future economy and employability. It thereby ignores that schools serve the much broader purpose of contributing to the personal, human and social development of the child with an overall aim to help them become well-informed and well-functioning individuals and citizens. In all countries, the obligatory school is the key socializing agent. The school provides the induction in the nation's culture, values, history and norms, and the school is a place where the developing child is exposed to a broad variety of disciplines and ways of thinking and acting.

PISA assumes that this complex set of purposes of the school can be reduced to one common, standardized and measurable metric, independent of country, culture and context. It is this basic postulation that is the most serious objection to the whole PISA undertaking. PISA reduces the purpose of schooling to be what can be measured on a single dimension in a single test at a particular time in a sample of 15-years olds in school.

### *Governance by "soft power": numbers, rankings and comparisons*

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<sup>79</sup> Verger, Lubienski & Steiner-Khamsi, 2016.

Neither PISA nor its "owner", the OECD, has any formal, legal power. They exert influence by through a range of instruments and actions, collectively often labeled "soft power".<sup>80</sup> A key role is played by the provision of numbers and indicators. Over the years, the OECD has become a key global provider of statistics, not only for the economy, but also in the education sector. The OECD statistics is increasingly being used by other global actors, including the European Union, the World Bank and gradually also UN-organizations like UNESCO.

Good and reliable statistics is, of course, important. But statistics and indicators do not just describe reality, they construct and shape reality. What you choose to measure also defines what is seen as important. How you construct an indicator builds on underlying assumptions and value-based priorities that are soon forgotten when league tables are constructed and presented.

Simon Breakspear is making the same point clear in a report with the telling title "*How does PISA shape education policy making? Why how we measure learning determines what counts in education*".<sup>81</sup>

Educational indicators that are meant to describe and compare different countries and cultures require standardization and clear definitions to ascertain that they measure "the same thing" across borders. Even describing and comparing a seemingly simple occurrence like "student flow" through the education systems is problematic. The International Standard Classification of Education (ISCED) constitutes the commonly agreed indicators have been developed over time by the UNESCO Institute for Statistics. The purpose is to provide "*a comprehensive framework for organising education programmes and qualification by applying uniform and internationally agreed definitions to facilitate comparisons of education systems across*

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<sup>80</sup> Bieber & Martens, 2011; Pons, 2017.

<sup>81</sup> Breakspear, 2014.

*countries*.<sup>82</sup> The handbook for this seemingly simple counting exercise is highly complicated. The work of this kind on a common metric of educational flow has over the years been developed by the UNESCO, but the OECD is gradually taking the role as provider of educational statistics.

The "soft-power" influence of PISA takes many forms, but they all rest on the use of comparisons, statistics and indicators. Xavier Pons has provided a critical review of "research on PISA effects on education governance".<sup>83</sup> Gita Steiner-Khamsi explores "the politics of league tables" and "cross-national policy borrowing and translation".<sup>84</sup> Sotira Grek has coined the term "the PISA effect" in European education policy, which she asserts builds on "governing by numbers."<sup>85</sup>

Climbing on the PISA rankings have been formulated as the main goal for schools in many countries. One example is Australia; where the prime minister, Julia Gillard in 2012 stated that "*The government will use PISA ... to track Australia's progress compared with the rest of the world. By 2025, Australia should be top five in the world...*". Other countries have made similar statements, using PISA ranking to the main educational goal.<sup>86</sup>

PISA results are creating competition, not only between countries, but also between states, territories and districts within one country (Canada, Australia, Germany, USA). Some researchers describe PISA as "a global educational race".<sup>87</sup>

### *PISA reporting: targeting the media and policy makers*

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<sup>82</sup> UNESCO, 2012.

<sup>83</sup> Pons, 2017.

<sup>84</sup> Steiner-Khamsi, 2003, 2014.

<sup>85</sup> Grek, 2009.

<sup>86</sup> Breakspear, 2014; Pons, 2017.

<sup>87</sup> Sellar, Thompson & Rutkowski, 2017; Sjøberg, 2016.

The educational governance by PISA has many aspects. The great institutional authority of the OECD is already mentioned. This authority is strongly exercised when results of PISA rounds are published every third year. Well attended and coordinated press conferences are arranged in all participating countries (often at Dec 5<sup>th</sup> at 1000 AM GMT). The press is provided with well-prepared briefs, and the international and national reports are released. Waiting to hear "the winner is..."

These PISA reports are not regular peer-reviewed documents written for an academic audience, but directly addressing the media and policymakers. These products are glossy and colorful, well written, with simple messages, conclusions and recommendations. Presentation videos and interactive data animations are also made available.

The invitations to the press briefings and the release of reports clearly state that the PISA results should be seen as indicators for the future the of the country's economic competitiveness. Just one example: The press invitation for the PISA 2006 release in the National Press Club, Washington, DC, December 4, 2007 had the title: "*Losing Our Edge: Are American Students Unprepared for the Global Economy?*" The text states that "*The lessons learned from PISA results [...] can, and should, be used to inform U.S. education policy so that our students graduate ... ready to compete, thrive, and lead in the global economy of the twenty-first century*".<sup>88</sup> Similar wordings are regularly used at PISA launches in other countries. In all participating countries, the PISA results are given broad coverage, invariably with the focus on the country rankings.

In the 3-year period between the releases of new PISA results, a series of "policy briefs" are released, thereby maintaining the public influence and pressure through media coverage. The purpose of these policy briefs is stated as "*a series of monthly education policy-oriented notes designed to describe a PISA topic*

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<sup>88</sup> Alliance for Excellent Education, 2006.

*in a concise, user-friendly way.*" Many of these "user-friendly" media-oriented products are made in close cooperation with commercial providers, where Pearson Inc. plays the main role. Until February 2019, 92 policy-briefs have been published.<sup>89</sup> They are often most interesting, but are not presented as scientific papers and addressing and addressing an academic community, as also noted in the title: they are "policy briefs". These briefs are not presented at academic conferences or published in peer-reviewed journals or books.

An influential initiative for maintaining the attention to the rankings and the educational competition is "*The Learning Curve, a global project to help influence education policy and practices, at local, regional and national levels*"<sup>90</sup>. The Learning Curve is "*published by Pearson and written by The Economist Intelligence Unit.*" The main product is a ranking of the quality of educational systems, based on several data sources (PISA, TIMSS, PIRLS, PIAAC etc). This list receives a lot of attention by the media, and also by politicians, who often get panic when their country is lower than they expect or when they move down on the rankings.

The PISA leader Andreas Schleicher is listed as member of the advisory board in the 2014 Pearson Learning Curve report. PISA data play a central role in the rankings published under the heading "Which countries have the best schools?" This ranking provides media coverage world-wide and maintains the pressure on policymakers to "do something". This creates and maintains a market for educational solutions, tests and programs. Also for Pearson.

As exemplified above, the so-called PISA-shock is not "created by the media" as often claimed, but is created by the OECD itself at the PISA release and subsequent policy-briefs and reports, often adapted to the national contexts.

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<sup>89</sup> OECD, 2018b.

<sup>90</sup> Pearson, 2018.



The modes of marketing of PISA create and maintain an atmosphere of urgency in many countries. This is also a "window of opportunity" for reforms. A perceived crisis provides the need "to do something". But, since PISA cannot by its design explain neither success nor failure, the "crisis" can open for all sorts of reforms being legitimized by PISA results.<sup>91</sup>

### *Expanding and extending PISA*

Seen from the OECD, PISA has been a remarkable success, which they also are proud of. By providing rankings, data and indicators based on its data, the OECD sets the scene for discussions about quality of schooling and entire school systems. And in most countries, politicians and policy-makers follow suit. Given this success; it is easy to understand that the OECD is also broadening its scope and influence on the education sector with other "PISA-like" studies, ranging from kindergarten to adult life, from the national level to school level, and from highly developed OECD countries to developing countries.<sup>92</sup> A brief indication of the expansion follows:

**"Starting Strong"**, often called Baby PISA, is one of several OECD-programs to address preschool/kindergarten level (ECEC: Early Childhood Education and Care), also by comparing attainments and competencies and the return of investments in early child care.<sup>93</sup> The home site states that *"New PISA 2015 analyses help highlight the relationship between the number of years of ECEC and academic performance at age 15, and the effects of ECEC attendance on health and well-being, and mothers' employability."*

**"PISA-based Test for Schools"** is a "PISA-like" test that may be used to test how well a school or school district compares with

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<sup>91</sup> Alexander, 2012.

<sup>92</sup> Sellar and Lingard, 2018.

<sup>93</sup> OECD, 2017a.

each other or with the PISA-winners. It may thereby bring the power of influence closer to school districts, local authorities and even particular schools and their teachers. The product is commercially available in the USA, UK and Spain.<sup>94</sup>

"**PIAAC, Survey of Adult Skills**" (often called "PISA for adults") is measuring skills and competencies of the adult work-force (16-65 years), on a scale similar to the PISA scale for "PISA-like" competences. The survey measures adults' proficiency in key information-processing skills - literacy, numeracy and problem solving in technology-rich environments - and gathers information and data on how adults use their skills at home, at work and in the wider community. In each country, a representative sample of about 5000 are interviewed in face-to-face settings. Some 40 countries took part in the first testing round, and data are published and available in many formats, see for instance.<sup>95</sup>

"**PISA for Development**" is a version of PISA that is meant to be used by low- and middle income countries. It will do this using *"enhanced PISA survey instruments that are more relevant for the contexts found in middle- and low-income countries but which produce scores that are on the same scales as the main PISA assessment."* In this project, the OECD also defines supposedly globally valid competencies that are needed for young people in all developing countries. Results are likely to be used as benchmarks for development assistance from the World Bank and other donors. PISA for Development publishes regular policy briefs with progress reports and findings.<sup>96</sup>

"**Education at a glance: OECD Indicators**" This is an annual book that brings indicators and statistics from the above and other sources, and is widely used by policymakers and researchers world-wide. It is presented as "the authoritative

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<sup>94</sup> OECD, 2018c.

<sup>95</sup> OECD, 2016d.

<sup>96</sup> OECD, 2018a.

source for information on the state of education around the world" and is published in English, German and French. It contains data from the best available sources, where the OECD's own data constitutes the core. These data are also available in different formats (like Excel) to be downloaded for analysis. It provides key information on the output of educational institutions; the impact of learning across countries; the financial and human resources invested in education; access, participation and progression in education; and the learning environment and organisation of schools.<sup>97</sup>

As argued above, the OECD has over the last decades emerged as probably the prime source for high quality data, statistics and indicators to describe and understand what is going on in education world-wide. Given the authority of the OECD and the power of numbers and statistics, one may say that this may to also be seen as the power to define the purpose of education and set the political agenda.

### **Winding up: take care**

This essay has focused on the problematic sides of PISA and how PISA has become a global tool for governance of education. The positive virtues of PISA should not be ignored. The PISA project has led to an increased interest in and concern for education and the competencies that young people need to develop to achieve the different "literacies" that are needed for their future life as well as for the wellbeing of their societies. The data bank generated by successive rounds of PISA is remarkable, and is most likely the largest and most professional data source in the history of social science and education. These data are also well documented and are open for most interesting research. The weaknesses and limitations of the data should, however, been kept in mind.

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<sup>97</sup> OECD, 2017b.

International comparisons in education are important; they can open for new perspectives, and they can provide inspirations and ideas for educators, researchers and policymakers. However, international comparisons have kind of a Janus face; they can be understood and used in two opposite ways. Such studies may be eye-openers to acknowledge and celebrate the great variety between youth, nations and cultures on aspects of education, and as such serve as a source of inspiration. But such studies can also be used normatively, providing a pressure to oblige and fit to allegedly universal and common standards set from the authority of external specialists. We experience what is seen as a prime example of New Public Management as well as a kind of global governance and standardization of education, as also noted by key educational experts.<sup>98</sup>

The influential Finnish educator Pasi Sahlberg characterizes the current educational PISA-driven educational reforms by the acronym GERM: Global Educational Reform Movement, characterized by privatization, market driven reforms, free school choice, competition and test-driven accountability.<sup>99</sup> He notes that "Finland has remained immune, but other Nordic countries have moved to adopt policies that are close to GERM".<sup>100</sup>

It is important that people (researchers, teacher unions) who are critical and skeptical towards PISA have thorough knowledge about the project and the other PISA-like studies mentioned in this essay. Data never talk directly and "for themselves", but need to be selected and put together to produce an argument or to support a stance. One may in fact also use PISA statistics and indicators to tell "other stories" than those usually presented in the media, often well prepared by the organizers. Given the enormous amount and variation of data from PISA, one may construct widely different views about success as well as failures.

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<sup>98</sup> Ball, 2012; Rinne, 2008.

<sup>99</sup> Sahlberg, 2011.

<sup>100</sup> Sahlberg, 2011, p. 125.

Widely different stories may be told; stories that are equally "evidence-based" as those too often told.

The stated intentions of PISA, as cited earlier, can easily be endorsed. No one can disagree with the need to ascertain that young people develop the knowledge, skills and competencies needed to face the challenges as citizens of the future. But the underlying ideological, economic and political ambitions behind the OECD-driven PISA project are often ignored or under-communicated. Even researchers in the PISA project seem not to understand (or accept) the overall political/economic aspects of the project. Many national reports do not quote the key statements that describe the normative intentions of PISA. Maybe they feel embarrassed by the claims being made?

The inherent difficulties in measuring what PISA asserts that it measures are seldom fully understood. The road from the brave intentions to the actual test instruments and published data is long and murky. This essay has pointed to some of the problematic issues in this process. This relates to the selection of subjects, (and of ignoring other subjects). Fundamental problems are also inherent in the development of an international, fair test, which by necessity leads to context-free items. Further complications arise when items are to be translated to other languages. In this essay and elsewhere<sup>101</sup> I argue that it is not just problematic to live up to the intentions laid down in the overall statements of PISA. I argue that it is in fact a "mission impossible".

No test is better than the items it consists of. The secrecy over most PISA items makes critique and scrutiny from the academic community and the public difficult. Many of the published PISA items have met serious critique, both for its contents and for its language and relevance. Translations into the many different languages have only to a limited degree been examined, but it is

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<sup>101</sup> Sjøberg, 2007.

easy to find flaws and even substantive changes and mistranslations. More research is needed here.

The problematic and not very transparent use of statistics receives considerable critique. Suffice it to note that the statistical procedures leading from individual test scores to the published population parameters, like PISA mean scores, are seriously challenged. Kreiner and Christensen write that their findings "do not support the claims that the country rankings reported by PISA are robust."<sup>102</sup> In the analysis of the PISA 2015 data, the procedures were changed, in part to meet this criticism. This caused the resulting PISA scores of some countries changed dramatically, much more than deemed educationally possible for a three year period. The details of these discussions are only for specialists in psychometry, and not for an essay like this. But it indicates the danger of just accepting PISA scores as given and unproblematic.

There seems to be little attention to the fact that many of the results of PISA are at odds with what educators recommend as well with what politicians propose as prescription to improve the quality of schools. Many politicians want their countries to catch up with the PISA winners, but to do so, they often advocate measures that are the opposite of what these winners actually do. Moreover, the PISA-winners are actually doing very different things, so this opens for choosing examples that fit the policymakers own priorities. There is a need to address seriously these paradoxical results.

PISA has a profound influence on educational policy in most countries, and this is indeed the clearly stated intention behind the project. It is, however, obvious that PISA results are used selectively, misused and even distorted for political purposes in many countries. The reference to PISA to justify and legitimize educational reforms is widespread. This influence ought to be better researched and scrutinized. PISA is in essence a political

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<sup>102</sup> Kreiner & Christensen, 2014.

project, a perspective that often falls outside the agenda of the educational research community.

The recent expansion of PISA into schools and school districts, kindergarten, adult education and education in developing countries needs to be followed with great concern, likewise the close connection between PISA/OECD and global, commercial actors in the strongly emerging field of Edu-business, like Pearson and McGraw-Hill Education.

Large resources are used to run the PISA project and to produce their reports and publications, but critical research is scarce and not well funded. A key aspect of the academic ethos is to provide a critical voice, and to question and challenge conventional wisdom. Given the great political and educational importance of PISA, there is a strong need for critical and independent research.

This brings us to a most important concern: critique of PISA may be risky business. The research communities in many countries are currently under the pressure to get funding and support for their activities. External funding has increasingly become important, also for public universities. For promotion in this system, the track record of the ability to get contracts and win bids has become an important aspect of an attractive CV. When positions are advertised, the track record of earning external money is important, also explicitly stated in the criteria for a successful application.

Many academic institutions have staff that depends on temporary contracts with external funding.

The funding for free, peer reviewed critical research, is limited, and often under pressure. More funding is available for contracted and commissioned research, from governmental and ministerial sources as well as from private interests. Academic freedom and the basic ethos of science and research are under increasing pressure. Many universities and their departments are run like companies, and the bottom line on the budget trumps the academic ideals. Large contracts depend on winning tenders

and bids. Balance sheets and bottom-line thinking has become part of academic governance, often with a professional, often non-academic leadership with external board members, representing the "users".

In such an atmosphere, the leaders and staff often exercise a form of self-censorship, not wanting to upset or criticize the interests that sit on the funding. If you are a young researcher, hoping to make a career and finding funding, it may not be a very good idea to be too critical towards the funding agencies for research, in particular those who are under strong political control.

The International large scale assessments, in particular PISA, but also TIMSS, TALIS, PIRLS and several others, provide solid funding for many academic institutions world-wide. For research institutions which rely heavily on external funding, it becomes important to keep a positive relationship with the funding agencies, in this case the government and their ministries of education and research. If you are young and want a career and a job, critique of PISA may not be your first choice of theme.



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# The Hidden Ideology in Objective Measurements – an Example from a Specific Tool for Quality Assurance in Schools

*Ricardo Kaminski*

**T**here is an inherent ideological discrepancy in the idea and practice of Quality Assurance (QA) within the welfare sector. While QA sails under the objective, instrumental and apolitical flag of strictly measuring the quality of the entity to which it is applied<sup>1</sup>, the entity itself – the specific school unit, municipality or even whole country – is expected to adapt to the parameters imposed upon it. This in turn governs the direction taken in work, activities, and discourse, which should per se be understood as highly political (Agevall, 2005, p. 21; Forsell & Ivarsson Westberg, 2014, p. 222).

QA thus intrudes deep into the professional domain. For the profession to which it is applied, QA has been linked to a phenomenon called “the performance paradox” within administrative research, namely the expectation that more and more time will be spent on documenting for the external audit, thus reducing the time devoted to practising the profession itself

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<sup>1</sup>Often with claims to “[...]provide measurable results” and a “clear image” regarding the quality of the unit to which it is applied.

(Rönnerberg, Strandberg, Wihlborg & Winblad, 2013, pp 145) In his dissertation, Andreas Bergh (2010, pp. 181-189) argues that schools in Sweden have undergone a transition in the 21<sup>st</sup> century, moving away from a focus on teaching in favour of modelled systems that challenge the autonomy of the teaching profession by prioritizing administrative and instrumental matters rather than educational ones. Bergh describes this as *teaching quality* being overshadowed by *result quality*, *market quality* and *system quality*. Within the field of education, the above-mentioned transition has been linked to a process of *deprofessionalization* of teachers (Bergh, 2010; Ozga, Larsen, Segerholm & Simola, 2011, p. 126; Liedman, 2013, p. 60). Instead of making their own qualified assessments, teachers are expected to adopt the definitions, language, visions and goals formulated by QA. Philosopher Jonna Bornemark (2018, p. 20) describes this transition as being experienced by a vast variety of professions within the public domain in Sweden. In Bornemark's words: "Complex processes that require discerning professionals are transformed into numbers, and ideas that cannot be measured are avoided". This transition can be linked to the spread of New Public Management (NPM), which can be described as the organization of governing techniques within public management, consisting of explicit results and quality goals, measurable standards as well as measurement of performance and accomplishment of specific goals, within which QA is a governing technique (Agevall, 2005, p. 21; Forsell & Ivarsson Westberg, 2014, p. 222).

In this article I will present an example from a tool for measuring quality and awarding quality certificates widely used for schools in Sweden.<sup>2</sup> The objective is to make visible the initially described discrepancy in instrumental reasoning by applying the concept of *pseudo quantities* (Liedman, 2011) in the analysis of a QA tool. According to Liedman (2011, p. 64), a pseudo-quantity is the phenomenon where something takes the *form* of a quantity, such as a number. However, when looking closely at how this number

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<sup>2</sup> Due to the nondisclosure agreement, the name of the tool has been concealed.

is constructed, it completely lacks the attributes of an actual quantity. Instead, such quantities should be understood as part of a social process that legitimizes a specific way of talking about and establishing the epistemic object and as such – the ideological subject – of *quality* for the entity being measured.

## Hallmark of our times

The genealogy of QA can be traced back to 16th. century manufacturing and trading practices in the Netherlands. These practices involved systematization of meticulous and detailed regulations, inspections, stamping and sealing procedures in the Dutch "measuring houses" where manufacturers marketed their products and met merchants (Nyström, 1955). Goods were carried to a "hall" and inspected, whereupon those that met a certain standard received a so-called hallmark; a certificate showing that they were of an adequate standard for sale (Nyström, 1955). Liedman (2011, pp. 50-66) compares this hallmark with the certificates of today. What determined quality in the manufacturing industry was the characteristics of the product and whether it fulfilled its intended function. For example, a good quality characteristic of a chair would be not breaking when sat upon and a piece of fabric should not fray or be full of holes, while a nail should be straight. However, Liedman asks what function schools should fulfil and, more importantly, who should have the power to decide? Merely by formulating criteria for measuring school quality, the very question of how future society is envisioned becomes relevant, because the question "what is a good school?" implicitly encompasses the question "what is our vision for the future of society?" (Martinsson, 2012, pp. 151-176).

## Market creation and governing framework

What we today recognize as QA within NPM derive from economic auditing concepts and practices that were transferred to a wider range of fields by the end of the 1980s (Power, 1999, p. 42). They must be understood through the global social, political and economic development which at that time was characterized by aggressive neoliberalism with rapid liberalization, privatization

and decentralization of previously state-provided social sectors (Harvey, 2005, p. 3). QA and NPM can thus be understood as the governing framework applied to previously state-ruled fields within the process of market creation through privatization (Rose, 1995, p. 40-59). In this global process, the Swedish school market was created in the 1990s (Swedish Government Official Reports, 2014:12, p. 135), specifically linked to the municipality reform of 1989 (Prop. 1989/90:41) and the private school reform in 1992 (Prop. 1992/93:230). Until the late 1970s governance mainly took the form of formulating rules, based on the concept of a hierarchical model. Goals, rules and guidelines such as the curriculum, city grant rules and central detailed requirements were formulated centrally to ensure that the targets maintained a high level of quality. This perspective was challenged in the 1980s by calls for more qualitative assessments of the specific programmes and measures evaluated (Karlsson, 1997, pp. 113 - 128). By the late 1990s, the Swedish government introduced quality audit requirements labelled “Ordinance (1997:702) on quality audit within school etc, 2 §”. This was preceded by the signing of the Bologna declaration the previous year, which is important for this particular context. The Bologna declaration was signed by the ministers of education from twenty-nine European countries, with the goal of making Europe a world leader in the area of higher education (Petersson, Olsson & Krejsler, 2012, p. 204).

Although the field of education has traditionally been considered a national rather than a transnational issue, the European Commission’s White Papers, where the Commission formulates propositions for the EU, exhibited a growing interest in a more coherent governance of education across Europe (Petersson, Olsson & Krejsler, 2014 p. 150). Specifically, the question of youth and education can be said to have taken a prominent place on the political agenda within the European objective to ensure competitive, knowledge-based economies (Petersson, Olsson & Krejsler, 2011 p. 1). The incentive is the concern that competition from emerging economic superpowers would lead to Europe losing its current position in the global arena. The field of education and the concept of lifelong learning are considered crucial factors for a bright European future (Petersson, Olsson & Krejsler, 2014, p.

151). In 2015 the Organisation for Economic Co-operation and Development (OECD) released a report on the Swedish school system, proposing that the Swedish authorities adopt external QA to a higher extent to improve the results of the PISA study (Organisation for Economic Co-operation and Development [OECD], 2015, p. 166). The PISA tests themselves can be said to have served as a measure of the national education system, where the results are presented in such a way that they appear to reflect the quality of the national educational system in each EU member state. The proposal to adopt QA to a greater extent can thus be viewed in the context of European governance.

Locally, competitiveness on the school market has become an area for which teachers are accountable (Lundhal, Erixon Arreman & Holm, 2014, p. 255). The QA and certification practices are based on the market rationality that the quality of the school is a commodity worth buying. On a local level, certification constitutes a commercial practice that helps the school to survive on the market. However, on the European governance level, certification serves as a tool for creating a specific type of youth and a deprofessionalized teacher-subject. The market demand for flexibility is common ground for both.

## **Ideology and interpellation**

The theoretical point of departure in our analysis is a critique of ideology and Critical Theory inspired by the eclectic mesh of ideas sometimes gathered under the umbrella term The Frankfurt school (Žižek, 2008, pp. 24-25). In a very basic sense, this perspective impels us to acknowledge that some claims of validity are determined by power relations (Habermas, 1996, p. 64), where both these claims and the power relations take the form of goal rationality (Horkheimer, 1987, p. 350). When the internal distinction between meaning and causality and the external power relation commingles (Habermas, 1996, p. 64), the ideological nature of language or knowledge is merely experienced as objective and neutral (Liedman & Ingemar, 1989, p. 25). The individual who finds him-, her- or itself in relation to a context, for example, a society, group or institution, will be interpellated

(Althusser, 1971, p. 170) or addressed as a subject who is supposed to know this information, these objective and practical goals and orient accordingly (Horkheimer, 1987, p. 350).

The QA tool is here presented as a social form that appeals to individuals to affirm themselves and each other as subjects within the epistemology created by the “objective” claims of validity. From this perspective, a tool that merely describes a school can be seen as engaging in ideological subject creation for the individuals within the school.

### **Pseudo quantities and measurement scales**

To examine and understand the QA certificate and the system of measurement itself, the analytical tool of pseudo quantities developed by Sven-Erik Liedman (2011) is operationalized by Stanley Smith Stevens’ theory of scales and measurements (Stevens, 1946, p. 679). For Liedman, a pseudo quantity describes a phenomenon where something takes the form of a quantity but totally lacks the actual properties of a quantity (Liedman, 2011, p. 64). Liedman argues that the phenomenon of pseudo quantities has become an established form of discussing quality through the spread of New Public Management in the welfare sector. All quantification of qualitative values builds upon the creation of pseudo quantities. Based on Aristotle, a quality denotes the descriptive question “what is?”, whereas a quantity indicates “how many?” (Liedman, 2013, pp. 45-66). Liedman argues that the idea of refracting a quality into a multitude of quantifiable aspects draws its conceptual representation from the Newtonian notion of prismatic refraction of light into a multitude of colours.



in the woods, the order in which I present my sticks, stones and blueberries is irrelevant. They might as well be presented as blueberries, stones and sticks without the order itself affecting the categories. In addition, nominal categories cannot be added together in a logarithmic way. If A, B and C are presented as 1, 2 and 3, we cannot add the numbers 1 and 2 together to result in the number 3, nor can you make blueberries out of sticks and stones. In other words, they are nominally different categories. The ordinal scale represents variables where the order in which they are presented is important. Stairs are good examples. The second step of the stairs must come between the first and the third one. Here, the distance is not important. The steps can be of a different height, length or even material, but what is important is the order in which they come. The interval scale is the first scale we can really call quantitative in a traditional sense. In the interval scale there is not only an order between the variables but also a distance. The distance between five and ten degrees Celsius is the same as between ten and fifteen. Finally, the ratio scale has the same principles as the interval scale, the only difference being that we can determine an absolute zero value. The zero in Celsius just happens to be where water freezes, so we cannot really say that ten degrees is twice as warm as five. However, with a ratio scale such as height or weight, it is meaningful to talk about the absolute relationship between the variables. Ten meters is indeed twice the length of five. The ratio scale can undergo all types of logarithmic transformation.

How do these measurement scales help us to understand the creation of pseudo quantities within QA and NPM in the welfare sector? Let us have a look at a specific tool for QA and the issue of certificates.

### **A Quality Assurance tool for schools in Sweden**

The main empirical material consists of documents pertaining to the composition of a QA tool for schools in Sweden. Access to the material was made possible through investigative work ordered by a medium-sized municipality in Sweden. The articulated goal of the municipality was to have all their schools and pre-schools



certified by the company selling the QA tool. Due to a non-disclosure agreement, the identity of the municipality and company will not be revealed. It should be noted that the teachers' professional experience of working with the tool is not included in the empirical material for this article. The vast body of news articles reporting on schools with certificates and information about how parents de facto take the certificate into account when choosing a school or preschool are also excluded. In addition, the phenomenon of QA and certification as a form of goal management is a practice that operates in fields beyond the world of education. In this sense, the empirical material can be understood as no more than a minor part of the phenomenon. The aim of the analysis of the material can therefore be said to be two-fold. The content of the tool is specific to the context of education, while the analysis of the form focuses on the quantification of qualitative values per se. With the latter, it is hoped that the analysis can be transferred to other fields where QA tools are utilized.

The empirical basis of this article consists of the following documents, with the actual municipality and tool de-identified:

- Audit reports for the school units within the municipality (35 documents)
- Quality criteria for compulsory education including preschool class and leisure time centre, school year 2014/2015
- Quality criteria for preschool, school year 2014/2015
- Quality Certification, Quality assurance system, Personnel presentation
- Quality Certification, self-assessment template for staff
- Quality Certification, Written Accounting (HOW – questions)<sup>3</sup>
- Quality Certification, Self-evaluation for the head/preschool manager
- Quality Certification, Surveys for students, parents and staff
- Quality Certification, Membership [BUN-2011.xxxx]

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<sup>3</sup>Author's translation of the Swedish "Hur-frågorna".

- Quality Assurance System [BUN 2014 / xxxx-X]
- School Inspectorate, "Collaboration for an Equal Assessment/Reassessment of National Exams 2015, Accounting for Government Assignments", Diary No. U2014 / 7535 / GV, (2016-11-16)
- <https://www.skolverket.se/skolutveckling/inspiration-och-stod-i-arbetet/stod-i-arbetet/arbete-med-skolans-vardegrund> (20-11-2018)
- School Act (2010: 800)

As can be seen from the material, the tool contains documents addressing and calling upon not only the teaching profession, but students, parents, heads and other personnel. In addition to the tool itself, texts from the Swedish National Agency for Education, the Swedish Schools Inspectorate and the School Act are included as empirical material for the purpose of contrasting and contextualizing the language of the tool in focus.

### **The implosion of scales**

In the following I describe the process in which the nominal categories are quantified within the framework of the tool, italicizing the different scale levels within brackets. The transition from one scale to another is further discussed in light of the concept of pseudo-quantities (Liedman, 2011) and a qualitative counterpart, pseudo qualities, is suggested, which is produced as a bi-product of quantification.

The tool divides school quality into eleven "domains" (nominal). Each domain is in turn divided into seven "steps" (ordinal). Within each step a number of statements, or criteria, are formulated (nominal). All the criteria are formulated in such a way that it is possible to agree or disagree with the statements. For example, the first step of the "Image" domain contains the criterion "The school attempts to improve its image". If the school is considered to live up to the statements listed under the given step, the step is deemed to have been achieved. In order to reach a step, the previous steps must also be fulfilled (ordinal). Each domain is weighted with one to three points, called the "factor" of the

domain (ratio). The factor for the “Image” domain is one, so if the school is considered to attempt to improve its image, it would gain one point. When the points are counted, a graph is printed out to visualize the result of the “objective” measurement. The tool in question hands out a quality certificate if sixty points are scored.

Domain	Factor	Steps							Points	
		1	2	3	4	5	6	7		
A	Knowledge and Skills			X						9
B	Security and Well-being				X					8
C	Students' Responsibility for their own Learning					X				8
D	Method and Teaching Role						X			4
E	Participation	X								4
F	Organization				X					3
G	Governance and Leadership					X				6
H	Communication						X			4
I	Competence							X		3
J	Resource Utilization	X								2
K	Image							X		3

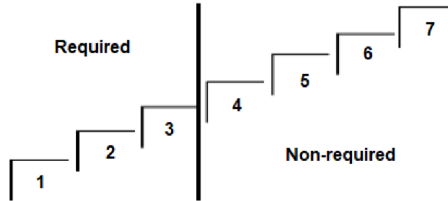
Fig. 2. A spreadsheet with graph showing the steps acquired by the school, and the points scored thereby. As presented by the external QA.<sup>4</sup>

The domains themselves constitute a nominal scale. Just like the sticks and stones, the A, B and C of the instrument are mutually exclusive categories and merely names for classification, i.e., the order in which they are presented is irrelevant. What comes after A could just as well come after B. Within each domain the steps are presented in the form of an ordinal scale; the order in which they come is of importance: To reach the second step, the first must be achieved and so on. The tool illustrates the form of the ordinal scale in its educational material, where the steps are presented with the illustration of stairs leading from the first step to the seventh, called The Stairs of Quality.

<sup>4</sup> Due to non disclosure agreement and copyrighted material, this is only a representation of the actual tool made by the author.

### The Stairs of Quality

Quality is not something that happens by itself – quality must be conquered step by step



*Fig. 3. Presentation material distributed to the teachers when they are introduced to the QA tool at the school, illustrating the seven steps divided into required and non-required criteria for certification.*<sup>5</sup>

The criteria within the steps themselves are, however, of a nominal character. Let us take two criteria from the “Security and well-being” domain as an example. On the third step we find the criterion “The school measures and follows up on study satisfaction and well-being”. On the fourth step we find the criterion “The students have a physical study environment that creates well-being”. These criteria are of a nominal character. The first criterion refers to the monitoring work conducted by the school and the second to the school’s physical study environment. They describe nominally and qualitatively different, mutually exclusive categories and there is no actual order between them. You can make efforts to monitor well-being without having a pleasant study environment, just as you can have a neat and tidy study environment without anybody trying to monitor satisfaction. Within the tool, however, there is an ordinal order between the nominal criteria. The characteristics and topology of one scale are thus collapsed onto another scale; the nominal scale is collapsed into the form of an ordinal scale.

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<sup>5</sup> Due to non-disclosure agreement and copyright material, this is a representation of the actual tool made by the author.

Yet another, and arguably more irremediable, implosion of scales occurs when adding the “Factors”, making it possible to not only decide the supposed order between nominally different categories but also the very distance between them. As the tool has a fixed absolute zero value of zero points, we know that it is a ratio scale ranging between zero and, when counting the domains and their factors multiplied by seven, one hundred and twenty-six points. Five points is, so to speak, half of ten points. The question then becomes: five and ten of what? As Liedman (2011, p. 64) points out, five and ten are actually not real quantities in this case. There is no real measurable distance between efforts to “improve the image of the school” and whether the school “actively works to influence and stimulate students to embrace basic democratic values”. A point can be scored by either of the two, or neither: it is a pseudo quantity. Within statistics one would say that the measurement is ascribed a higher scale level than is actually appropriate and therefore lacking in transitivity (Hellevik, 1996, pp. 132-133).

In the very same way, even the criteria are not really qualitatively descriptive. As the criteria are transformed into pseudo quantities, they merely give the measurement the illusive backdrop of a qualitative assessment. In other words, the process that creates pseudo quantities also transforms the very nominal categories and criteria into pseudo qualities. The criteria may have the form of descriptive qualities, but when the final “quality score” is allocated, these scores fully lack the properties of a qualitative assessment. The “quality score” of one school is not comparable with the score of another. We do not know if the points scored come from, for example, criteria pertaining to teachers engaging in marketing, from measuring job satisfaction, working with democratic values etc. The quantification process has depleted the qualitative descriptions of meaning and left us with a dead number and a certificate. So, if the QA tool is neither quantitative nor qualitative, what is it? The argument put forth is: it is ideological.

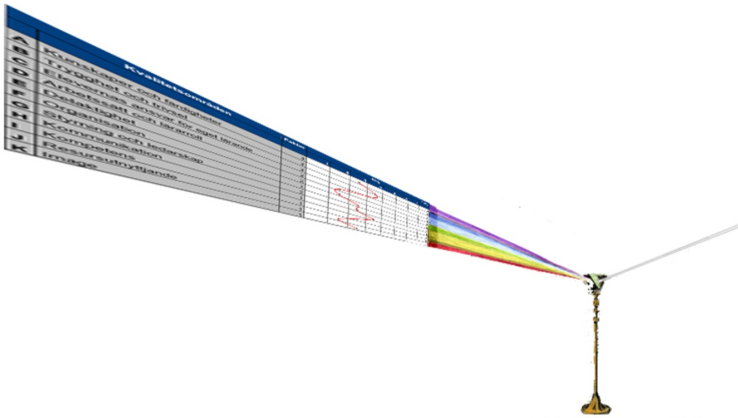
## **The goal rationality of a descriptive question**

We can decode the empirical material through a “symptomatic reading”, where the negative space of the text is identified as a kind of inner connective tissue between what is visible and what is hidden and latent in the text (Rehmann, 2013, p. 197). For the tool in question, the empirical material contains documents and questionnaires for the professional categories within the school to fill in, called “The How Questions”. These questions cover all the criteria for the various steps for all the domains, allowing the teachers to describe how they work to promote, for example, the image of the school or how they measure the students’ knowledge, and so on. The symptomatic reading of the innocent question asking the teachers “How do you do this?” is thus understood as conveying the latent imperative “Do this!”, acknowledging the ideological nature of the seemingly descriptive information within goal rationality. The idea of the 'individual' interpellated as a certain kind of subject is used here to interpret the question “How do you promote the image of the school?” as the latent expectation to “Include in your work the promotion of the image of the school!”. Thus, Quality Certification becomes a goal rationality that imposes upon the teacher a set of expectations based on the very question of what a teacher is supposed to do in order to be a good teacher.

## **The prism metaphor**

The concept of “quality” serves the function of what Žižek (2008, p. 112) calls a master-signifier, which is the point through which the subject is 'sewn' to the signifier. When the tool is directed to the teachers, it “hails” the profession: “Hey teachers! Quality!”. The answer to the “hail” is already designated by the very content of the epistemic object of quality created within the tool. Conversely, how we speak about school “quality” is funnelled through the practical goal of being certified by the tool, thus commingling the epistemology of the school with the external power relations. This is a vital part of the argument for how the analytical concept of pseudo-quantities can be fruitful for recognising the ideology hidden within objective measurements. The diagram in Fig. 2 is a good example of visualization, as it

illustrates how the tool makes use of the Newtonian conceptual structure; note the red line that runs through the diagram. What does it imply? The choice of a "line diagram" is indicative in this context. This type of chart is commonly used to show how the value of one variable changes over time, often to illustrate trends in relation to other variables. In contrast, bar graphs are used to visualize the values of several factors of variables of a nominal nature, such as in the case of the eleven domains, from each of which stacks will rise. The line chart might be misused, but it is nevertheless illustrative; after all, the choice of the "line diagram" conveys that we are dealing with a single variable: "quality". The line curve in the diagram is no less than a metaphor for the school's measured wavelength movement across a spectrum of frequencies: the pure light made visible through the tool's prism.



*Fig. 4. The author's illustration of the metaphor of the prism. The "objective" white light refracted through the tool projecting the "truth" of the school's quality over a spectrum.*

The metaphor of the prism illustrates how the ideological subjects, or master-signifiers, produce and organize discursive structures. The prism, i.e. the QA tool, refracts the school's epistemology into

a structure of discourses, which are then reflected back into the ideological subject “quality”. The projection is thereby imagined to be equivalent to the possible epistemology of the school: The objective is the ideology and the ideology is the objective. The school is what the tool says it is. Naming it a “tool” suggests that something instrumental is happening, as in Newton's prism, where it is presented as a matter of simply refracting “the quality”, measuring it and projecting the result onto a sheet of paper. Or as the tool states, “[...] to make the quality of the school visible” (Marketing material for the tool, 2011).

### **Required and non-required criteria**

Leaving the form of the tool and moving to the second layer of the argument, we shall examine the criteria as they are presented in the documents constituting the tool. The tool sorts the criteria into those required for certification and those that are not – and so will we. While the different factors of the domain imply assigning prominence to criteria pertaining to traditional school values such as knowledge, well-being and participation rather than economic values of image, resource utilization and organization, the division of the tool into required and non-required criteria for certification suggests a different weighting than that implied by the factors. If the factors led us to believe that each step of the “Knowledge and Skills” domain is worth three times more than each step of the “Image” domain, the division into required and non-required criteria suggests another interpretation. To become “Quality Certified”, schools must fulfil all the criteria for the first three steps of each domain. This means that the nine points obtained by the first three steps of the “Knowledge and Skills” domain are equally important as the three points for the first three steps of the “Image” domain. At the same time, the three points obtained from the fourth step of the “Knowledge and Skills” domain is worth nothing in comparison to the one point for the first step of the “Image” domain. Instead, what matters more than these pseudo quantities is not in which domain a specific criterion is formulated, but on which side of the division between required and non-required criteria it is placed; is the criterion on a step below or



equal to three, or is it placed on a higher step as a non-requirement?

For the Critical Theoretical examination, the dividing line between required and non-required criteria is an obvious methodological focal point. The perspective raises questions about what is being presented and what is being repressed in a given context as well as what is taken for granted (Alvesson and Sköldbberg, 2008, p. 348). In the field under investigation, where quality and measurability take the form of a hub for the conversation concerning the school, I believe that it is justifiable to explore what is being presented and what is being excluded with regard to the “measured quality” within the tool, but also as a result of the phenomenon of QA practice. The idea is to “break up the petrified social reality and make it available for new political considerations and decisions” (Alvesson & Sköldbberg, 2008, p. 348). Instead of focusing on goal achievement, i.e., “how should we reach the set goals?”, the critical researcher must ask how the goals themselves impact on the entity (Alvesson & Sköldbberg, 2008, p. 328). To achieve a “critical understanding”, sociologist Johan Asplund (1979) argues that we must place the study object in a context that allows comparisons. Asplund holds that it is important to go beyond the phenomenon itself. This can be done by situating research objects in a wider cultural, economic and political context (Alvesson & Deetz, 2000, p 16). An example of going outside the phenomenon itself is recognizing the influence that history, culture and social positions have on knowledge, as well as identifying and questioning the assumptions underlying common ways of perceiving, understanding and acting (Alvesson & Sköldbberg, 2008, p. 348). To discuss the issue, I use the Swedish curriculum, Swedish School Law and research material for the purpose of contrasting. That is not to say that these are unproblematic or unworthy of critical scrutiny. On the contrary, they too are impregnated with ideology. One could even argue it is the very purpose of law and curriculum to reflect a set of ideological visions and values. The use of contrast is meant to make visible the change of emphasis within the field of education in Sweden in terms of the mission and expectations set for the professional

categories in this area. I argue that change can be made visible by contrasting the different sets of discourse against each other.

## **Domain criteria**

Let us delve into the required and non-required criteria and how they relate to the second layer of the argument, where the actual content addresses a specific type of flexible teacher-subject as an arena for political governance. I will here focus on the domains A-E, which are called “main processes” in the tool. The domains examined here are:

- A. Knowledge and Skills
- B. Security and Well-being
- C. Students' Responsibility for their own Learning
- D. Method and Teaching Role
- E. Participation

If the dividing line between required and non-required criteria within each domain can tell us something about the visions and implications that they evoke in the schools and teachers, what would those visions and implications be?

## **A. Knowledge and Skills**

Within the required criteria for “Knowledge and Skills”, there is a clear focus on the students' results and the capacity of schools to measure and document them. We are informed that it is of importance for the school to have “[...] routines to follow up on the knowledge results at an individual level” and that “different methods are used to monitor, measure and document students' knowledge and skills”. When we consider these criteria in relation to the non-required criterion within the same domain, i.e. “The school has developed methods to ensure equivalent assessment of knowledge and skills on the basis of the national governance documents”, the contour of a specific governance is made visible. With this division between required and non-required criteria, we can understand that the design of the tool places greater importance on the school documenting student results than on

methods to ensure an equivalent assessment of said results. The placement of these specific criteria on each side of the requirement division raises the question of what function student results are supposed to fulfil in relation to school objectives. What cohesive framework of ideas is at work here?

In a report from 2015, the Swedish Schools Inspectorate concluded that schools that apply methods to ensure equivalent assessment are generally more restrictive in their assessments than schools that do not do so. In other words, efforts to ensure equivalent assessment tend to lower the average grades (Swedish Schools Inspectorate, 2015, p. 5). A dissonance is discernible in the context of school marketization and QA as a competitive practice. The pressure on schools to prove themselves competitive on the school market has been linked to such phenomena as “teaching for the test”, where teachers are encouraged to focus on ensuring that the students perform well in specific tests, in order to enhance the measured test results (Lundahl & Erixon Arreman, 2014, p. 255). Schools with a higher average grade are considered more attractive on the market than schools with a lower average. The dissonance between the goals of market competitiveness on the one hand, and equality in education on the other, can be seen in the line separating required and non-required criteria in the epistemic object of quality created by the external QA actor. The latent cohesive framework conveyed through the dividing line is that “quality” is not achieved by ensuring that all schools assess students and grades in the same manner, but rather through a focus on handing out high grades. For the teacher interpellated by the tool, ensuring quality implies focusing on measurable and marketable results such as high grades, rather than non-market oriented values such as equivalent assessment.

## **B. Security and Well-being**

The theme of schools' measurement ability reappears in the “Security and Well-being” domain and can be seen in the required criterion to “[...] measure and monitor job satisfaction and well-being”. Within the same domain we find the non-required criteria “students have a physical environment that creates well-being”,

“the school creates a social environment promoting safety and community” and “the school works actively and consciously to influence and stimulate students to embrace our society's basic democratic values”. I will highlight two main themes located on the dividing line between the required and the non-required criteria for this domain.

The first theme within “Security and Well-being” is the emphasis on measuring and monitoring well-being. What matters is that safety and satisfaction are measured, rather than the actual provision of a safe and pleasant working environment. When seeing a school certified as fulfilling the criteria required for “Security and Well-being”, one might gain the impression that it is a safe and pleasant school. However, this is not necessary for certification. What is certified is that the school measures well-being, which is ensured by the very fact that the school employs the QA surveys. Thus, by employing the QA tool, the required “Security and Well-being” criteria are automatically met. What is certified is merely the use of certification practices and thus the tool itself. This might not be the first thing that comes to mind when choosing a school certified for ensuring “Security and Well-being”. Nevertheless, as a marketing strategy it serves its purpose.

The second theme covers the non-required criterion of influencing students to embrace basic democratic values. This “democracy work” is one of the main missions of a school as described in the Swedish school law and curriculum (Swedish National Agency for Education, 2011; *The Swedish Education Act*, 2010:800, 1 ch. 4§). Even when the Swedish National Agency for Education discusses the topic of security and well-being, it does so in relation to this democratic mission. It is through the educational work carried out by schools with values such as human rights and democracy that security and well-being are to be ensured (Swedish National Agency for Education, 2019). The actual question of what kind of work is necessary to ensure security and well-being at a school is ignored, as the answer given by the external QA is subtle but clear: forget about democracy and human rights, security means ensuring a competitive advantage on the school market. When adding the latent implications of the ordinal scale,

conveyed by the metaphor of the stairs, there is another, perhaps deeper message to be interpreted: we can only reach (the step of) democracy and human rights through (the steps of) competitive practices.

### **C. Students' Responsibility for their own Learning**

This domain pertains to the creation of a specific youth-subject. As the name of the domain implies, an emphasis on student responsibility is written into the tool itself. The students are to be trained to take the initiative and develop their ability to “[...] take a personal responsibility for their own learning”. We can contextualize this with what Petersson and colleagues describe as the creation of a specific type of youth-subject where “life-long learning” and values such as “initiative for learning” are seen as central (Petersson, Olsson & Krejsler, 2012, p. 204). The European Commission elevates the idea of personal responsibility for learning as a more or less decisive factor for a bright European future on the competitive global market (Petersson, Olsson & Krejsler, 2014, p. 151). The desirable youth-subject should constantly be ready to re-evaluate knowledge and to adapt to the ever changing market. I argue that we can here discern the neoliberal political-economic theory of extensive individualization serving as a guiding rationale behind the idea of individualized responsibility. QA and NPM are presented as governing frameworks applied on previous government-ruled fields within the process of market creation through privatization (Rose, 1995, pp. 40-59). When QA promotes a specific youth-subject that fits the neoliberal social form for which NPM was established, may we dare to say that the desirable youth-subject in question is a neoliberal dream?

Within this domain the tool makes reference to striving to meet the goals of the national curriculum but does so only as a non-required criterion. By promoting an individualized responsibility, the placement of the curriculum as a non-required criterion indicates a shift. Within the Swedish curriculum, the term “responsibility” is now used in relation to the school's responsibility for teaching: “The school shall take responsibility

for ensuring that each student acquires and develops the knowledge that is necessary for each individual and member of society” (Swedish National Agency for Education, 2011, p 11). The curriculum highlights schools’ responsibility for teaching with reference to Swedish school law in that students “shall be given the guidance and stimulation they need in their learning” (*The Swedish Education Act*, 2010:800, 3 ch. 2§) When addressing the students’ responsibility, the curriculum does so in terms of their “possibility and conditions”, an addition that is not made by the tool. The tool can thus be said to impose a shift from the schools’ responsibility to that of the students, i.e. from society to the individual.

#### **D. Method and teaching role**

The “Method and Teaching Role” domain concerns the very creation of the teacher-subject and what role teachers are supposed to internalize to be considered quality teachers, worthy of scoring points and being awarded certificates. A criterion for this domain is that “[...] the teacher role is characterized by variation and flexibility”. The fact that the role of teacher is mentioned can be interpreted to mean that the criterion is directed towards the teaching profession; teacher-subjects “characterized by variation and flexibility” are considered valuable. There is an interconnection between QA within NPM and the ideal of flexibility that drives the deprofessionalization process. The sociologist Michael Allvin highlights how the ideals of flexibility have spread and become manifested in a variety of ways since the early 1980s, such as flexible working hours, flexible work tasks, attitudes etc. (Allvin, 2008, p. 19). According to Allvin, flexibility in terms of work is an idea that emerged in relation to customer-oriented areas of work in decentralized organizations with a high degree of goal management. While flexibility and goal management are closely linked to decentralized organizations, deregulation and the idea of the individual's own agency (Allvin, 2008, p. 42), Allvin argues that there is an inherent contradiction in the idea of flexibility. While flexibility is promoted as leading to a higher degree of individual freedom and agency, at the same time it requires a higher degree of participation, self-awareness and

activity in new and ever-changing goals (Allvin, 2008, p. 34). Goal management therefore requires control technologies that promote a subject who is active of her/his own volition; technologies that, in turn, operate by means of knowledge, rationality and subject creation (Allvin, 2008, p. 42). While flexibility indeed promotes the individual's own agency, it is an agency defined and restricted by external goals. When the criterion addresses the teacher-subject with the latent imperative to embrace a "flexible teaching role", the question arises: flexible with regard to what? Flexible in relation to their own professional assessments, pedagogical research, market demand, school law or in terms of the goals defined by external actors such as the tool itself? If, for example, teachers were not aware of the fact that their role includes marketing work and promoting the image of the school before encountering the tool, they will most definitely be aware of it afterwards – it is a criterion for certification. A flexible teacher-subject should then be able to easily adapt.

## **E. Participation**

The “Participation” domain operates on the very concept of participation itself. If a school scores highly in the area of student participation, what would we believe the participation consisted of? A required criterion for certification is that the “students participate in the quality assurance” and another that “parents are given the opportunity to participate in the quality assurance”. We can see in the required criteria for “Participation” how the very idea of participation is defined by the QA work itself. In other words, the required criteria for the participation of students and their parents are defined as the school prompting them to respond to the self-assessment questionnaires in the tool. This is formulated in the required criterion “the school measures and monitors the participation of students and parents” by means of the surveys in the QA tool. Thus, by employing the QA tool, which includes surveys addressing students and parents, the school (self)fulfils the requirements for “Participation”. The traditional concept of “participation in the learning process” is also considered, but is a non-required criterion formulated as “the school works actively to continuously increase the students’ participation in the learning

processes”. The concept of participation can be said to be operationalized through the placement of criteria on either side of the requirements and non-requirements for certification. The tool defines participation as using the tool, so if the tool is used the school scores highly in terms of participation, while what would traditionally be associated with participation in the learning process is defined as unnecessary for certification.

There is another usage of the concept of participation in the Swedish national curriculum that links it to the mission of all schools to ensure democratic values. The curriculum uses the term participation in the context of preparing “students for participation and co-responsibility and for the rights and obligations that characterize a democratic society” (Swedish National Agency for Education, 2011). Thus, the curriculum relates the concept of participation to democratic principles rather than QA practice. The tool, however, does not mention “democracy work” under the domain of Participation.

### **The clandestine shift of values**

New forms of control are being adopted in the decentralized schools. However, at a time when goal management has become a priority, the question of which goals are set will be crucial for how society will be shaped. The QA mythology of objectively “measuring quality” through the creation of pseudo quantities and leaning against a positivistic Newtonian conceptual legitimization conceals the fact that the measure itself imposes goals and values on schools. In the empirical example analysed for this article, these goals and values differ from the national curriculum and Swedish school law and can be said to short-circuit the ideological governance of the schools. Words are given new meanings and connotations. Responsibility is shifted from the schools to the students. Participation for both students and teachers now includes taking part in marketing rather than pedagogical practices. Security and well-being are defined as gaining a competitive advantage through working to achieve certification rather than educational work with values such as “human rights” and “democracy”. Knowledge and skills should be measurable,



promoting summative over formative assessments and deprioritizing equivalent assessment in favour of higher grades.

The tool can thus be said to impose ideological values, goals and governance rationales on the education system without prior public discussion and scrutiny by government institutions. Driven by the need to survive in the market, the certification process becomes a self-fulfilling end in itself. By looking more closely at what is presented and what is excluded in the specific QA tool, we have seen that values such as school image, marketing and flexibility with regard to the ever changing market take precedence over democratic values, equivalent assessment and the national curriculum.

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